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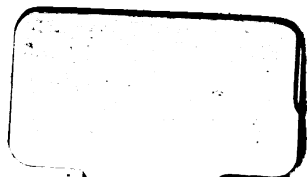
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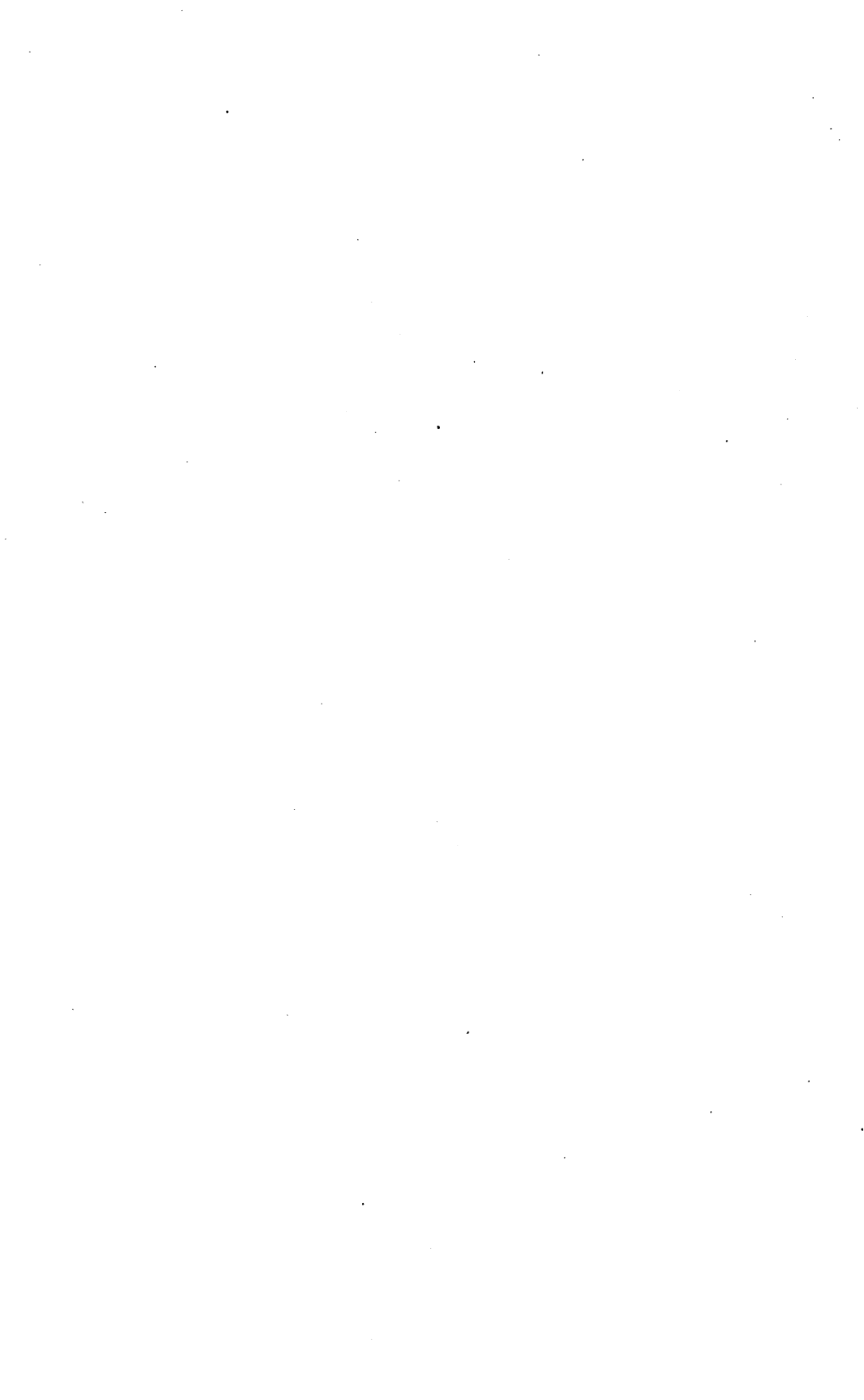
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# Oriental and Biblical Journal.

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We are happy to introduce to the public a new magazine, entitled **THE ORIENTAL AND BIBLICAL JOURNAL**. The object of this magazine is to give results of latest researches in all Oriental lands, such as Egypt, Assyria, India, and countries farther east, including also Italy, Greece, Troy, and other regions known to classic history. It will also embrace many subjects of a more general character, such as the manners and customs of all nations, their traditions, mythologies and religious notions, as well as language and literature; and everything that may serve to illustrate the history of the human race, or confirm the truth of the scripture record.

A large number of distinguished scholars have already promised to contribute to its pages, and among them are Rev. Selah Merrill, D. D., Rev. Howard Crosby, D. D., Rev. James Strong, D. D., of Drew Seminary, New Jersey, Rev. Lyman Abbott, D. D., Rev. T. O. Paine, the best Egyptologist in this country, Rev. A. H. Sayce, D. D., F. R. S., of Oxford, Eng., and many others.

The Journal will also embrace correspondence from missionaries and residents in various parts of Asia and Africa, Japan, Polynesia and Australia, and the expectation is that all Ancient and Primitive Races of the Earth will ultimately be embraced within its scope.

There is no doubt that Bible scholars, classical students and professional men will find it a valuable accession, as the subjects to which it is especially devoted are now becoming very important, and the effort to comprise the many facts which are now scattered through so many channels into one journal, must be very welcome.

Hitherto there has been no reliable publication in this country on these subjects. Scholars, if they would keep pace with the progress of discovery, are obliged to take a large number of European journals, and to purchase many and expensive books. We have peculiar advantages for securing information as to the results of investigations. Our magazines have a circulation among the societies of Europe, and we have already secured the hearty co-operation of some of the most eminent Archaeologists in the world.

Arrangements are in progress by which we shall secure the Reports of the Palestine Exploration Party, and of the Archaeological Societies at Rome, Athens, and other places, as they are published.

## TABLE OF CONTENTS.

Palestine Explorations.	Museums.
The Silent Races.	Ayenar.
Ancient Lake Dwellers.	Fountain of Youth.
Aztec Signs for Speech.	Mandarin Language.
The Test of Linguistic Affinity.	Asiatic Origin of the Brazilians.
The Elephantine Cave.	Copper Age in Mexico.
Population of Jerusalem.	Our Contributors.
A Monument of Cyrus the Great.	Scope of Our Journal.
Destruction of Ancient Monuments.	Neolithic Implements.
Ancient Settlements of the Phœnicians.	Selections from Magazines.—Book Reviews.
Sources of Information as to the Prehistoric Condition of America.	

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THE IDOL AYENAR.

# THE ORIENTAL JOURNAL.

JANUARY, 1880.

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## PALESTINE EXPLORATIONS.

BY REV. SELAH MERRILL, D.D.

Between Lake Tiberias and the Dead Sea there is, at present, but one bridge over the Jordan, and that is Jisr Mejamieh, about six miles south of the Sea of Galilee. Just below this lake are the ruins of a once fine Roman bridge of ten arches, which was, no doubt, on the main route from Tiberias and Tarichæa to Gadara and the eastern cities and plains. On the Menadhireh, or ancient Hieromax, or Yarnuk (for the stream is known by all these names), which is the first tributary of the Jordan on the east, below the lake of Tiberias, there is a bridge of five arches situated only a few miles from the point where the two rivers unite. The next and only other bridge of which there is, at present, any trace, is one, now in ruins, at the Damieh ford, which was on the high-road from Nablus, or ancient Shechem, to Gilead and the East. This bridge was originally Roman work, but there are evidences of extensive repairs by the Moslems, or Crusaders. On the east side the bank is quite low, and the wide flat at that point is often overflowed; hence it was necessary to build a causeway, which was done at great expense. I traced 450 feet of this causeway, or eastern approach, to the bridge, which was supported on arches, nine of which remain. The original length of this causeway was probably one hundred or more feet, greater than that indicated by the figures which I have just given. The foundation of the abutments at the eastern end are still perfect. The bridge itself, over the river must have been not far from one hundred feet in length. Formerly, there were ruined piers in the stream, and my Arab guides said they used to swim to them, but they have been washed down by floods and are no longer visible. The foundations on the western side have likewise disappeared. Roman civilization demanded the convenience and luxury of substantial roads and bridges, and when some civilized power again gets control of Syria and the Holy Land, we may expect that these conveniences for travel and commerce will be restored. At the present time, at Damieh, and also at Jericho, there are ferry-boats run by strong ropes, which are stretched across the river. Once in the Bible, when David returned from Mahanaim, a ferry-boat is mentioned for carrying across the household and goods of the King. (2 Sam. XIV, 19).

*Artificial Tels, or Mounds.* I wish also to call attention to the *tels* or mounds which exist in the Jordan valley, because, as some of them are wholly or in part artificial, they carry us back to the Canaanites, or to the pre-canaanite period, and may help us in solving the problem of the site of the "cities on the plain" that were destroyed. These mounds appear in groups. There are some interesting ones around Lake Merom, on the Upper Jordan. Again, in the Succoth region, just north of the Jabbok, there is a second group; and, finally, on the Shittim plain, there is a third cluster, which deserves our careful study. Independent of any historical evidence on this point, I think my researches have established the fact that, with regard to the Jordan valley, the flat land was never occupied by cities and towns of importance, but that these were situated either in the foothills or upon natural or artificial mounds in the plain. In connection with the lowlands, cities are several times mentioned in the Bible as occupying *tels*; while in the valleys of the Tigris and Euphrates, a city presupposed a mound upon which it was built. There is a statement (Numbers XIII, 29) which shows that the Canaanites lived along the Jordan valley, and their occupation of it may have extended back into the remotest times. A decisive proof that these *tels* were the sites of cities or towns is the fact that several of those in the Lake Merom and the Jabbok groups have ancient ruins upon them; and further, all the mounds, without exception, on the Shittim plain are covered with ruins, and at least three of these we are able to identify with places which existed in the time of Joshua. Hence, it follows that if we are to look for the sites of ancient cities, no matter how ancient, in the Jordan valley, we must first of all examine the *tels*. One of these *tels* in the Succoth group bears the name of Der-'Alla; and Neubauer, in his "Geography of the Talmud," states that Succoth was called Ter-allah. These words are identical, with the exception of the two initial letters, t and d, which often interchange. My opinion is, that we have a clue to the identification of the Succoth which is connected with the history of Jacob. From certain indications I suspect that cuttings into this mound would reveal ancient remains which, even if they did not consist of numerous objects of gold and silver, such as have rewarded Dr. Schliemann's excavations, might, nevertheless, be extremely important in elucidating the history and antiquities of this valley. Somewhere in this region were the brass foundries of King Solomon, where the metal work for the temple was cast, and as the same physical conditions exist now that existed in Solomon's time, it is not improbable that future researches and excavations may enable us to point out the exact locality where that work was done.

It may be well to notice the fact that, at certain points along the valley, there are slight elevations, which may be called *littoral mounds*; they are, however, not remarkable in any way, and have no importance to deserve our notice. This fact is referred to because a certain critic of my work, who withholds his name, has stated that all the mounds in the valley were "*mere littoral mounds*." With all due respect, I must say that this critic writes without any adequate knowledge of the facts, and that the mounds of which I am speaking are, beyond dispute, wholly, or in part, artificial. My chief reasons for this opinion are: *first*, that in a few cases, where they have been cut into, ruins, walls, pottery and bricks have been found; *second*, columns, capitals, and fine squared stones project from the ground, suggesting the existence of buildings there in ancient times; *third*, supporting walls exist in few cases, formed of several tiers of great boulders or blocks of unhewn stone, which are four and five feet thick, eight and ten and even twelve feet long, and six feet wide; and in two or more cases, where the walls formed angles, there were foundations, apparently, for towers.

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### WAS THE JEWISH RELIGION ETHNICAL?

The *Princeton Review*, for May, has an article upon Kuenen's work—The Religion of Israel—which is worthy of study. The author gives a general outline of Dr. Kuenen's conclusions, as follows: The children of Israel once resided in Egypt, and were polytheists. They had previously been fetichists and worshiped trees and stones. The first step to a purer faith was taken when Moses, who was a monotheist, during a period of wandering in the Sinaitic desert, called the tribal God Javeh, or Jehova, and imparted the ten words or the ten commandments to them, "thus connecting the religious idea with the moral light of the nation." It was in the days of the judges, when the tribes ceased to be nomadic and became agriculturists, that the second step in religious advance was taken. This ensued upon the rise of that astonishing type of character, the prophetic, which exercised such gigantic influence upon the entire subsequent history of Israel. To tribes disjointed and antagonistic, fighting to the death with the Canaanitish antagonistics, the prophets gave the cohesion of monarchy. They also established monotheism, for by gradual steps and reiterated teaching during centuries, they succeeded in erecting Jehovah—who had been since the days of Moses simply what Chemosh was to the Moabites, the patron god of the tribe—into the one supreme and only God. The further development of the religion of Israel was

the result of the contest of the prophetic with the ecclesiastical order, prophets and priests, in the fell struggle for existence, furthering the survival of the fittest, as prophets and people had previously done. In fact, says Dr. Kuenen, the Old Testament, critically regarded, acquaints us with three forms of the worship of Jehovah—the Jahvism of the people, who worshiped Jehovah as one in a plurality of gods, the monotheistic Jahvism of the prophets, and the Jahvism of the priests, whose worship was a ritual of compromise. In the early days of the existence of Israel as a nation, they possessed no sacred literature in any way resembling the modern Pentateuch. Jehovah was worshiped by the masses as a tribal god in the shape of a calf or young bull by sacrifices upon mountains or hills, the so-called groves or high places; indeed the tribal god was popularly regarded as a terrific god of light, whose messengers were fierce noonday heat and consuming fire; human sacrifices were made in his honor; in short, the current conception of Jehovah bordered on that of Moloch. It was the special merit of David, sensual and half barbaric as was his theology, to have transferred the ark of Jahveh to a settled abode in Jerusalem, and to have given official recognition to Jahvism as the religion of the nation. From such an act there was but a step, thinks our author, to the erection of that magnificent temple of Phœnician design as well as workmanship, which was the grand achievement of Solomon. Solomon, probably, also laid the foundation of a priesthood, and of those three high festivals which had already become a permanent institution in the seventh century before Christ. Thus, too, Solomon unconsciously originated a deviser and custodian of an increasingly diversified oral law. Nevertheless, in days neither of David nor Solomon was there, asserts Dr. Kuenen, any trace of that system of ritual known as Mosaism, nor a portion of the books of the Pentateuch which embody that system. The reign of Hezekiah was the date of its earliest appearance. Then the ten words of Moses and that small collection of private laws known in later times as the Book of the Covenant, was the only written code of religion and politics then extant. Seekers of pure religion set themselves to formulate their desires, to ascribe them to Moses, to commit them to writing, and to place them in the temple, where they were soon after *found* by the High Priest Hilkiyah, as we *find* a letter which has been dropped into our letter-box. This first draft was still further elaborated by Ezekiel during the dreary days by the river Chebar, where, fully assured in his own mind of the certainty of a speedy return, he drew up what our author calls “a complete plan for the organization of the new Israel,” giving, in the first place a minute description of a new temple. appending, in the second place, a

series of detailed precepts concerning religious worship, the staff of ministrants, and the rights and obligations of the Prince, and regulating, thirdly, the division of the land. It was during the time of Ezra, between the years 458 and 444 B. C. that the final redaction of the law took place. In the recension of Ezra, the fabric of so-called Mosaism, may be regarded as practically completed.

This view of the Jewish religion is a new one, and in some respects we may acknowledge it to be true. There is in the Scriptures of the Old Testament a progress of thought and an historical sequence which are evident even to the superficial observer. The connection of this progress with the history of the world must also be recognized. If, too, there has been an ethnical development of religion among the races of the earth, there may have been also among the Jews. It is, however, this very point of the comparison of the Jewish religion, as an ethnical faith, with other religions, which is its strongest feature. If the Levitical system is the slow, natural outgrowth of the religious instincts of man, a survival of the fittest, a victor in the prolonged struggle for existence, then the religion of Judaism is certainly worthy of our admiration and confidence. We put other religions in the balance and find them wanting, but we find this outweighing all other systems, both in the minds of the intelligent and with the common people. There is nothing like it notwithstanding its deficiencies. Searched and criticised, tested and tried, throughout all the ages, it stands now, among the civilized people of the earth, a book of faith for the enlightened and of practice for all.

The genetic origin of Mosaism may be accepted, and as the supernatural gift of Deity it may be rejected; but if men will come to the solid truth as contained in these books, they will consider this same truth, at least, as of divine origin. As a work of history the Old Testament is one of the most remarkable books in existence. The esoteric evidence has been dwelt upon by writers for many years, but there is an exoteric evidence which, to some, is as forcible. It seems as if Dr. Kuenen, judging only from the contents of this review, had reached conclusions before the time. It is certainly unscientific and unscholarly for any one to jump at conclusions without first proving the premises. If there is absolute historical proof that the books of Moses were not composed (we do not say compiled) until the time of the captivity, 400 year B. C., and that then they were a fraud perpetrated by Jewish priests, who threw back their own knowledge and their own fabricated system into the earlier dates of history, then let it be presented. But, has it been proved?



## THE ANCIENT LAKE DWELLERS.

The Swiss explorations this year have furnished a large number of additional relics of the lake dwellers. The most important of these "finds" has been at Seeberg, in Canton Berne, on a small lake and adjoining peat-bog. The bulk of these remains consisted of the usual flint and bone implements, articles in wood and pottery. The pottery is very primitive, made entirely by hand, and baked before an open fire. Nevertheless, some of the specimens possess a certain rude shapeliness, sufficient to show that the designers or makers of them were not altogether destitute of artistic instinct. The lake dwellers were also basket-makers, and not unskilled in carpentry, one of the "finds" being a bent basket-handle, exactly like the those in use now,—and the hatchet handles are exceeding well made. One wooden instrument bears an almost startling likeness to the stock of a pistol, and might easily be converted into one; it probably served as the haft of a bone tool or weapon for boring or thrusting. Bone chisels were numerous, varying in size from four to ten centimeters long, and from one to two centimeters broad. Arrow heads of the same material were found, and the metatarsal bone of a stag, fashioned into a pair of forks, and evidently intended for use at a table. From the number of bone hair pins found amongst the flint tools and weapons of war, it is evident that they paid some attention to the adornment of their persons. The animal remains found on the turf moor are numerous. Among them are the bones of the dog, the badger, and the common otter. The latter were doubtless met with in the immediate neighborhood of the lake, but the presence of the bones of the wild ox and of the bear indicate that the lake dwellers were bold and skillful hunters, as well as ingenious tool-makers. They were also keepers of cattle, for the most numerous remains of animals brought to light were those of the common cow and the moor-cow.—*Selected.*

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AZTEC SIGNS FOR SPEECH.

The Smithsonian Institution has just issued a quarto pamphlet of 86 pages, by Dr. Habel, entitled "The Sculptures of Santa Lucia Cosumalhuapa." This site is near the city of Guatemala, capital of the province of the same name. Up to the discoveries mentioned in this account it was not believed that the Maya or Aztec civilization extended south of the Sierras. The twenty-two figures, beautifully executed in heliotype, convince us that this is so far from the truth that the sculptors of Santa Lucia stand among the very first for beauty in designing and skill in executing. The same barbaric excess of ornament and the same

brutality in religious observances characterize these sculptures that we see exhibited in those of the ancient Aztecs of Mexico. On the other hand, there are some symbols not hitherto observed on Mexican structures. The most notable of these are the signs for speech and emotion, if the author has rightly interpreted them. Nearly all the plates represent a priest or a layman adoring a deity, and offering human sacrifices. From the mouth of the adorer, or of the severed head, or even of the obsidian knife, emanates a vine-like ridge, grouped here and there with little knots, variously grouped. This speech sign ascends in a variety of curves, and frequently passes to the ear of the deity, who is enveloped in a great profusion of symbols, doubtless indicating his function. In a few of the slabs flame-like figures ascend from the waist of the adorer. Dr. Habel considers these as the expressions of emotion. In one of Stephens' drawings a similar flame issues from the mouth of a trumpet. If this be true, we do not know which to admire the more, the cleverness of the designer, or the ingenuity of the decipherer.

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#### NEW GUINEA.

This is the largest island on the globe. It was discovered in 1811. The peculiar race which inhabited this island were called Papuans, from the Malay word *papuwah*—woolly hair; so different from the straight hair of Eastern nations. This woolly haired race is found in widely separated lands, such as Tasmania, Feejee Islands, Southern Africa, the Phillipine islands and the Malay peninsula. Woolly hair, a Dolicocephalic head and chocolate brown skin are marks of the race. While successive incursions of lighter colored, smooth haired races have exterminated them elsewhere, they are found in New Guinea in their perfection.

"The Jewish feature," such as the aquiline arched or prominent nose of the Papuans has been recognized by many. The forehead is rather low and retreating, the mouth large, the lips full but not thick, giving sometimes an ugly look; but their features are in contrast with the prominent prognathic jaws, flat noses and thick lips of the African negroes. The appearance and dress of the inhabitants of New Guinea are remarkable. A dense mop of hair projecting six or eight inches from the skull, nose and ears pierced, with feathers or shells suspended from them, a naked body with a simple T band, or a shell, or a girdle of fringe and possibly a necklace of teeth or shells, form the unique dress and adornment of men or women. If they wear any token or charm, it is a small carved wooden figure, or a tatoo on the skin. Their houses are built on piles in the water, or else on posts similarly set in the ground on the hills inland. Each

house accommodates several families. A larger building in every village has posts covered with shapes of men and faces, and is a counsel house. The villages are like the pile villages of the stone age. The Papuans use pottery for cooking. Their weapons are spurs, wooden swords, bows and arrows, and clubs. They possess stone axes, made smooth and sharp by long grinding. With these they clear off forests and make fences. The people are agriculturists, but the bow and arrow are the distinctive weapons, being the ethnological feature which connects them with the ancient widespread people of the negroid type.—*A. R. Wallace, in Cornhill Magazine.*

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### THE SILENT RACES.

BY. L. J. DUPRE.

High o'er the desert's scorching plain  
Rises the Orient's stately train  
Of strangely sculptured stone;  
Grim sentries of a vanished race,  
Guarding from ruin's stealthy pace  
Dim records which their marbles trace.

The gaunt-eyed sphinx essays to speak;  
Her moveless lip and hueless cheek  
Have found a human tone;  
Over the hopes, the joys, the fears,  
The tumult, of the rushing years,  
The listening world her whisper hears.

Dark Egypt's lore of hearts and homes  
Lies in her dust-crowned catacombs;  
Her pyramids of stone,  
Like giant volumes in the sand,  
Teem with the records of her land,  
Writ by the marble's stony hand.

The nameless altars, rude and dark,  
That worship of the Druid's mark,  
Ring with a monotone  
Wild as the symbolistic line  
That rose o'er Thor and Odin's shrine,  
Where now the pallid moonbeams shine.

The ruined abbey's wind-rocked bell,  
Whose elfin echoes rise and swell,  
Like mighty spirits moan—  
The owl that watches in the tower—  
The wind, a wandering troubadour—  
Chant sad requiems o'er and o'er.

This western world her voice of might  
Lifts up amid her dreamless night,  
With weird and wondrous tone;  
For silent, vanished races sleep  
Beneath her tossing forests deep,  
Where hoary-headed ages sleep,  
While restless murmurs round them creep.

Each nameless mound that plants its base  
 Within this mighty wilderness  
     Speaks with a mystic tone.  
 Around each rude-shaped urn and vase  
 Flit dim shadows of a race  
 Whose voiceless story God can trace.

Whence came they? Whither did they go?  
 What myriad tales of joy and woe  
     Resound with mingled tone  
 Above this consecrated ground,  
 That speaks with hollow, ghastly sound,  
 Its orator, a nameless mound.

And did they love? and did they hate?  
 Did they in pain and pleasure wait  
     With human laugh or moan?  
 No answer comes, no music rings,  
 No Solon speaks, no Homer sings  
 Where Sleep and Silence reign as kings.

The dark-eyed maiden's liquid song  
 Ringing these limpid waves along,  
     Has left no echoing tone.  
 In nameless graves, they slumber well,  
 Where Lethean billows ebb and swell  
 On shining shores of Asphodel.

## THE TEST OF LINGUISTIC AFFINITY.

BY ALBERT S. GATSCHET.

Resemblances of a fortuitous character have often been pointed out between languages of the Old World and languages of the New, but real affinity between linguistic families of the two hemispheres has never been scientifically proved. The childish supposition that the American Indians might be descendants of the lost ten tribes of Israel gave a lively start to inquiries of this character, and this impetus has not subsided yet. To search for affinities by mutually comparing the languages of *this* continent *only* shows more scientific understanding, and in several instances has led to important results. Several tribes living now at enormous distances from their parent stock have been proved to have separated from it at an early period, as the Apache and Návaro from the Tinné; the Tútelo from the Dakota; the Maipure from the Moxo; and the Huastec, near Vera Cruz, Mexico, seems to have been severed from its cognate idioms, the Maya, Tzendal, Quiché, etc., by an immigration of tribes of alien race. In the Eastern hemisphere we see the Malay dialect of Mozambique far distant from the other Malay-Polynesian idioms, and the same holds good for the Brahui idiom of the Belutches, which pertains to the great Dravidian stock of the Dekhan. All of these are separated from each other by linguistic areas spoken by quite different races of men.

The true method of testing two languages for their mutual affinity has often been discussed by linguists. Had their remarks been heeded, we would not constantly see the Aztec *Teotl God* declared to be akin with Greek *theós God*. The investigation is of a double character, for it extends over the *words* or the lexical part of the languages, and over their grammatic *forms*, inflections, etc., especially over the affixes.

1. The homonymous *words* showing a similar or related signification in both languages compared, must be carefully divided into loan words, borrowed from another nation; and in words, which apparently form part of a common stock. In many instances this discrimination is an easy one, in others very difficult, and then no decision can be arrived at without a great amount of ethnographic and historic knowledge, to which an intimate acquaintance with the phonetic peculiarities must associate itself. The discovery of loan words is of great importance for tracing ancient migrations, inter-tribal commerce, elements of culture and the progress of civilization. A nation borrowing no words from neighbors or foreigners, like the Iroquois, appears to the ethnologist in a very different light from tribes showing more receptiveness. On the other side, the homonymous terms which are not loan words and seem to have sprung from a common source, can be proven to be cognate only by etymologic analysis, viz: by proving that both have a common radix. This presupposes a thorough acquaintance with the family to which both belong, in several or in all of its dialects.

2. *Grammatic* affixes express relation, and are either prefixes to the radix, suffixes to it, or infixes inserted into the root. Affixes borrowed from other languages are sometimes met with, but this is rather exceptional. If two languages are cognate, a portion at least of all affixes will agree in both; the remoter the affinity, the more we shall see them altered according to the phonetic laws prevailing in the family and slight differences will be observed in their functions also; the stronger the affinity, the larger will be the number of the affixes coinciding. All affixes are roots, often ground down by wear and tear to simple vowels or consonants, and if from the most profoundly studied languages we can draw any inferences upon all tongues, all grammatic affixes serving to express relation consist of so-called pronominal roots, or radices of relation. Hence, if we wish to discover the full and more ancient form of these affixes, we have to look out for the (demonstrative) pronouns of the language.

The affixes serving for the *derivation* of verbs and nouns must be examined next and reduced to their simplest form, viz: to their radices. The roots of derivational affixes are roots of quality as well as radices of pronominal origin; many coincide with the grammatic (or inflectional) roots mentioned before.

3. After achieving these fundamental inquiries, we proceed to investigate and *compare* the position of the affixes before, in, or after the radix; the inflection of the nouns and verbs; the position of the words in the sentence, and many other structural points of minor importance. All these comparisons must be made under the guidance of the *phonetic laws* traceable in both idioms to be compared.

After eliminating all the loan elements and scoring up the real affinities between the languages compared, we look at the radices obtained from words and signs of relation. A small amount of similar roots would not decide with us the question of affinity. Languages really akin to each other always show a considerable number of roots coinciding; not only of onomatopoeic roots, for some of them prove little only, but of roots of quality (called sometimes verbal roots) and especially of nominal roots. Could we compare American languages in the shape they were spoken three thousand years ago, as we are enabled to do with Greek, Sanscrit, Chaldean, Egyptian, etc., this would facilitate our investigations enormously and give infinitely more certainty to our results; but as things stand now, we have to institute comparisons by uniting the material of all dialects of one family, and placing reliance on this historic basis, extend our comparisons from it to other idioms.

#### THE POPULATION OF JERUSALEM DURING THE SIEGE OF TITUS.

Thomas Chaplin, M. D., long a resident of Jerusalem, has made, within a few years past, some study of the question of the population of Jerusalem during the siege by Titus, and his conclusions are very important and should be as widely circulated as possible.

It is difficult for those unacquainted with Oriental habits to believe that three millions of people could have been collected within the walls of ancient Jerusalem. Indeed one writer, Dr. Chaplin says, has characterized the statements of Josephus upon this point as "so childish that it is surprising any one could ever have repeated them," and has given "60,000 or 70,000" as the "extreme estimate" of the number of persons in the city when Titus came against it.

Dr. Chaplin thought that some definite knowledge might be arrived at by estimating the number of square yards to each person in the houses of the modern city. Measurements were accordingly made, in the Jewish quarter, of houses which would fairly represent the dwellings of the three classes of which the Jewish community is composed.

No. 1. The house of a very respectable family, that of a merchant, family consisting of nineteen persons. House had a ground floor, partly subterranean, a first floor with court yard, kitchen, etc., and an upper floor with two more chambers, a court yard, and a small kitchen. Building was quadrilateral,  $53\frac{1}{2}$  by  $19\frac{1}{2}$  feet, outside measurement, giving 54.8 feet to each inhabitant.

No. 2. House of a principal Rabbi who holds a high and influential position. His house was one of the best in the Jewish quarter, was  $34\frac{1}{2}$  by  $22\frac{1}{2}$  feet, outside measurement, and gave accommodations to sixteen persons,—48.5 square feet each.

No. 3. House in the poorest section of the quarter. Occupied by Polish and native Jews. In one room a tailor lived with his family and worked at his trade; in another a school for little boys was kept. The house had a court yard with staircase to the upper story, and a gallery running round three sides. It lodged 39 persons. Was  $59\frac{1}{2}$  by  $50\frac{1}{2}$  feet, outside measurement, giving 77 square feet to each inhabitant.

We have thus:

No. 1.	1,043	square feet,	with 19 persons.
No. 2.	776	" " "	16 "
No. 3.	3,004	" " "	39 "

TOTAL,—4,823 square feet with 74 persons, or about seven square yards to each inhabitant. None of these people complain of over-crowding, and it is remarkable that the poorest have the largest space.

If the area of the city at the time of the great siege be taken as 3,500,000 square yards, and one-half be deducted for space occupied by streets, the Temple, Antonia the Xystus, the Synagogues, &c., we have left 1,750,000 square yards for dwellings, which, if populated only as thickly as the average Jewish houses of the present day, would have contained 250,000 persons, living in comfort according to the requirements of Eastern habits. Dr. Chaplin thinks that in all probability the houses in the ancient city were several stories high, and further, that some of the streets are known to have been very narrow. Besides, there was a large influx of people from the neighboring towns and villages, coming there for refuge. And, moreover, Josephus never pretended that the immense influx of people at that time was not productive of great discomfort and eventually of great distress. Considering all these facts, he concludes that the statement of the Jewish historian may be nearer the truth than has sometimes been supposed.

S. M.

## A MONUMENT OF CYRUS THE GREAT.

Among the treasures recovered by Mr. Hormuzd Rassam during his recent explorations in Assyria and Babylonia is a cylinder belonging to King Cyrus, which Sir Henry C. Rawlinson describes as one of the most interesting historical records in the cuneiform character that has yet been brought to light. It is written in the Babylonian script, and was discovered among the ruins of Birs Nimroud, which without doubt corresponds to the ancient city of Borsippa. The cylinder is 9 inches long, by  $3\frac{1}{4}$  inches in diameter, and covered by 45 lines of text. The writing is very minute, and it is computed that the inscription would run to about 130 lines of average length. The monument has been considerably injured, and a few portions wholly lost. "When it does begin to be legible it is found to relate to the very moment of that great historical event, the capture of Babylon by the founder of the Persian Universal Monarchy. Nabonidus has abandoned his capital, which has fallen into the hands of Cyrus, though he is still struggling against his fate in Babylonia. But the priestly worshipers of the rising sun declare that the Gods have rejected him for his impiety and for his scandalous neglect of his temples. On the other hand, they extol the piety and the greatness and glory of Cyrus, whom the heavenly powers have raised up to avenge their cause."

Certain people are described as his subjects, whose name is taken to be equivalent to "Black-heads," reminding one of the negroes. Following the introduction is the text of a proclamation issued by Cyrus upon the taking of the city, in which the King speaks in the first person, "I am Cyrus," &c. Cyrus is made to speak of his reparation of the temples of Babylon, and of the favors conferred upon him by Merodach, Bel, and Nebo in answer to his prayers to them, of the homage paid to him by distant nations, and of the gatherings of the people in the city to proclaim him King.

Sir Henry Rawlinson says this new text settles forever, in favor of Herodotus as against Ctesias (in Diodorus), the genealogy of Cyrus. He was the fifth in descent from Achæmenes, next to whom came Teispes, then Cyrus the grandfather, and Cambyses the father of Cyrus the Great. Moreover the succession was direct, not indirect, as Prof. Oppert had maintained. The inscription styles the native country of the Persians "Assan," which Sir Henry Rawlinson gave reasons for locating in the plains between the modern Shuster and the Persis of the classical writers. An important religious centre named *Calana* in the inscription was illustrated by reference to the Calneh of Genesis and the Calus of Isaiah. The text with full translation will soon be published.



One such important record as that now brought to light awakens an eager desire among scholars to have all the mounds which line the Tigris and the Euphrates thoroughly examined.

S. M.

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#### DESTRUCTION OF ANCIENT MONUMENTS.

One of the most deplorable facts connected with the East, is the destruction of ancient monuments. Marble statues, columns, capitals of exquisite workmanship, and various other works of art, such as exist in ruined cities, are being collected by the natives and burned into lime. Mr. Wood testifies to this fact at Ephesus, and Mr. F. W. Percival states that: "The Temple of Cybele at Sardis has never been excavated, and the soil has accumulated above the pavement, to a depth of at least twenty-five feet; but, even this is not sufficient to preserve it, for I found when I was there that a quarry had been dug on the north side, and that splendid blocks of marble were being broken up into small pieces to burn in the neighboring limekilns." Of the Temple of Diana at Tekeh (Magnesia ad Mæandrum), he says: "The walls of the peribolus are standing to a height of about twenty feet, and they have hitherto been the most perfect of their kind existing, but I fear that they will soon disappear altogether, for I saw a number of men employed in pulling them down and carting away the stones for building purposes.

There is no apparent remedy for this, and in fact it is no new thing, for this matter of borrowing building materials has gone on for centuries. This system of stealing, also the practice of burning into lime, has been carried to a great extent in Palestine.

Some old ruins have been drawn upon by neighboring and modern towns to such an extent, that almost nothing is left of them. The explorer may be certain he is standing on the site of some ancient and famous city, but it is a matter of wonder to him what has become of it. At the north end of the plain of Gennesareth, there is an important buried town. It is near Khan Minieh, and in our judgment, is Capernaum. The walls where we ourselves saw them exposed, were built of fine blocks of stone, and the whole structure appeared to be of superior workmanship; but these walls are rapidly being dug up by the natives and converted into lime. Facts like these, of which numerous illustrations could be given, ought to stimulate societies and individuals to press the matter of researches in all parts of the East with all possible diligence, in order to rescue the valuable archaeological and other ancient treasures which still remain.

S. M.

## THE ELEPHANTINE CAVE.

The Island of Elephantano is nearly a mile long, thickly covered with forest trees, principally of palms and tamarinds. The appearance of the island is singular, having two peaks, each several hundred feet high. The cave is located in the valley between the peaks, nearly half way up the hill, being about a half mile from the landing. Formerly the traveler was carried from the boat to the shore by the natives, the water being very shallow near the island, but now there is a little pier on which we landed and walked to the shore.

A cut-stone stairway leads up the hill to the Temple. The stairs are a stupendous work, and the steps are well worn by the feet of the millions of pilgrims and worshippers at these celebrated Cave Temples. The front of the Temple is open now, but there are indications that there was an entrance in which there may have been solid doors; but the early descriptions of this Temple are silent upon the subject. The place, with the surrounding scenery, is truly romantic. The magnificent tropical trees and brilliant wild vines all contribute to form a scene of peculiar interest. The Temple is about twenty feet high, and, being all open, is as light as day, and every part can be seen without the aid of artificial light. The great room in this Temple is one hundred and thirty-three feet by one hundred and thirty. There are several apartments, but all communicate with each other. The rocky roof is sustained by immense fluted pillars with ornamental capitals, that somewhat resemble poppy plants of many designs, and all hewn out of the solid stone.

The principal piece of statuary is the Trimurti, or Trinity, which stands opposite the principal entrance. These colossal figures stand twelve feet high, and are at once grand and imposing. The three heads are supposed to represent the Hindoo Trinity. The most prominent head represents Brahma, the Creator of all things. The features are pleasing and calm, with an indication of serene repose. Vishnu upon one side has a mild and benignant expression. The figure has been injured and sadly mutilated. In one hand there is a lotus blossom.

On the other side there stands Shiva, with an expression so fierce, showing teeth so threatening, that he well represents the Destroyer. Shiva holds in one hand a cobra with expanded hood, and waiting for a chance to strike the blow that is sure to carry death to the victims. It was a sculptor of rare merit that designed and executed these heads in this hard rock. They are quite unlike, but you cannot fail to discover the design of the sculptor in making these figures. The same figures are repeated in different parts of these strange temples, and are so similar that you cannot fail to see the symbol, but none of the other statues are so impressive as the Trinity.

There are smaller rooms in this temple, the columns and walls of which have very curious sculptures. These curious figures have received adoration for many centuries, and until quite recently a large number of pilgrims and worshippers came hither to make their offerings, and to worship. While some of the figures in this Cave Temple are well executed and may claim merit as works of art, yet many of the statues here are, to say the least, crude symbols, and so very inferior that I cannot understand how anyone could have worshipped them, but they did. There is a stone, or statue, which is symbolic of the Lingam, which is the most ancient of all the Hindoo symbols. This one in past years was of very great repute, and considered quite efficacious as a cure for barrenness.

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#### THE ORIGINAL SEAT OF THE PHŒNICIANS.

Prof. Julius Oppert claims to have made a discovery in connection with an island which the cuneiform records mention as situated in the Persian Gulf. In Sumerian characters the name reads *Nitukki*, which may signify "original land." The scholar just mentioned formerly pronounced it *Dilmun*, but recently he finds reasons for changing his view and reading *Tilvu*, which he identifies with Tylos of the Greeks. This is mentioned by Theophrastus, Arrian, and by Pliny. It has long since been recognized in the modern *Samak-Bahrein*, the largest island of the small archipelago of Bahrein. It was celebrated for cotton and pearl fisheries, and the Chaldean legends claim that in this place many prominent divinities lived or had their origin. This place, with one or more adjacent islands, has been regarded as the original home of the Phœnicians. Strabo locates them here. If Prof. Oppert's reading and identification are correct, the fact will be an important corroboration of the testimony of the Greek writers.

S. M.

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#### MUSEUMS OF PREHISTORIC ANTIQUITIES.

In an address delivered before the annual meeting of the German Society for Anthropology, etc., at Kiel, Prof. T. Ranke mentions the fact that Mr. Steeven, of Salisbury, England, had made a donation of £15,000 for establishing a museum of prehistoric antiquities in that city; that in 1874 a citizen of Kiew, Russia, gave 30,000 roubles for a similar purpose, and that in years previous to 1878 the Belgian Government spent 40,000 francs in the scientific investigation of prehistoric caves. Paris is in possession of a college and laboratory for anthropology, and in 1880 an exhibition of anthropologic specimens will be opened at Tiflis, south of the Caucasus. And how much, we would like to know, has been done in that respect in the United States of America?

A. S. G.

[We give with pleasure the following description, which we have selected from the *Missionary Herald* for January, 1878, from which number also we have borrowed the cut which illustrates the article.—ED.]

### AYENAR.

BY REV. GEORGE WASHBURN.

The frontispiece takes us into the remote village-life of Southern India, and sets us face to face with one of the most ancient superstitions of its non-Aryan inhabitants. The figures are the mounted guards before the temple of Ayenar. They are made of terra-cotta, here, as always, of gigantic size, higher than the roofs of the neighboring houses. I have measured groups of statuary before a temple in Coimbatore, forty feet in length and nearly twenty feet high. These mounted guards are usually flanked with less pretentious figures of foot-soldiers, in the same material,—sometimes with the representatives of a whole army, not omitting the elephants. Among these are interspersed other figures,—votive gifts for offspring bestowed or cures granted in answer to vows and prayers. Still nearer the door of his temple are the images of seven virgins,—queens of the Demons, over whom Ayenar exercises his sway; for he is lord of the realm of ghosts and spirits.

With such guardians at his gate, and such attendants, one would expect to find the shrines of the deity suitably imposing. Not at all. Most frequently the shrine is an unadorned cube of masonry, perhaps eight feet square, having a low door in front, but pierced with neither window nor aperture to admit light or ventilation,—more fit, one would think, for curing hams than for the residence of a deity. The image inside is the work either of the potter or the stone-mason, and is equally rude and contemptible.

Notwithstanding this, Ayenar numbers his votaries by millions. He is one of the gods most generally worshipped by the rural and agricultural population of Southern India. In a very peculiar class of "village deities" he is the only male, the other seven being females, but not his wives—Village Mothers, as they are called. In but few villages are pagodas found; but almost no village will one find without its shrine to Ayenar, or one or other of these Village Mothers, and scarcely a tank, with its underlying rice-fields, whose embankment is not protected by a temple of this deity. And frequently, in groves remote or near the villages, one suddenly comes upon his temple or that of one of his vassal queens. He and they are really the Dei Minores of the Dravidian villages of Southern India.

The position Ayenar occupies in Brahminical mythology, and in Dravidian worship, makes him an excellent subject for a study in comparative mythology. All that has ever been written on Hindoo books, and most of the unwritten legends of the country, exhibit him to us as a Brahminical deity. Studying Hindoo literature alone, we should learn only this; yet, on investigation, there can be no doubt that he is a god of Dravidians and Dravidian origin; or, rather, a demon of this primeval race, adopted into the Aryan pantheon, and his parentage so concealed as to be scarcely discoverable.

According to Brahminical mythology Ayenar is the child of Vishnu's and Siva's lust; but having told the monstrous and abominable story of his birth, their mythology abandons him. While the writers of the Puranas drag on through endless folios of the poetic legends of their own deities, not a book pertaining to the worship of Ayenar, nor a poem in praise of his exploits, have they cared to write. This of itself forewarns the student of his outcast race, and demon nature. He is known by his Dravidian name of Iyenar—Lord; and by this name he is known both in the Tamil and Malayan languages; and as Lord he has his appropriate place in their prehistoric mythology, at the head of the demon world. As such he is the god of the villages. In mountainous Malayalam he is the God of hunting. Among the agricultural Tamils he is "The Good Warrior," "The Watchman," "The Guardian of the fields and tanks." As a member in the families of the Brahminical Triad, his associations and shrines should be chiefly with the families of the gods, and in the great pagodas of the cities. His companions are demons, not deities, and his favorite temples are outside the villages, on the banks of tanks and in remote places. Though so generally worshipped, his temples are never splendid pagodas; his low born gypsy nature prefers a hut or hovel, where he could be better served. As a deity of Aryan origin he should be worshipped especially by Brahmins and served by Brahmin priests. Like them, he should eschew all flesh meats, and the offerings made to him should be unbloody sacrifices of rice, fruits, ghee, and incense. Brahmins do, indeed, serve to some extent at his shrines, but they have not been able to displace the village potter or farmer from his priestly office, and the latter not only makes the bloody offerings but receives the rice-offering also. Brahmins claim that Ayenar belongs among non-flesh-eating deities, as becomes his asserted lineage, yet sheep, goats and fowls are offered at his shrine, as to all the Dravidian demons. The allegation that these are not to him but to his demoniacal crew only shifts, but does not remove the difficulty.

A striking feature of a South Indian landscape, as one looks over the intensely green and level rice fields towards the tank

which nourishes them, is one of those singular temples of Ayenar, which is sure to guard its embankments. There is a doubt in the mind of my Brahmin informant whether Ayenar should not be regarded merely as the watchman of the place, and not as the preserver of the tank embankments on which his temple is commonly built. But for several reasons I am inclined to think that the latter is the correct opinion. It is affirmed that in former times he used, occasionally to require a human sacrifice. In the case of two tanks near Madura, tradition assigns in the one case to the hunter caste the privilege of affording a sacrifice, and in the other it lays the obligation of himself becoming the sacrifice on the superintendent of the water channels. Men from these classes, it is said, were sacrificed in former times; and to this day, when the daily offering is made to the idol, another leaf is laid, with rice upon it, for the spirits of those deceased persons. In the case of one of them, the descendants still enjoy a freehold granted to the family on account of his death in this way.

Thus, following these faint foot-prints, we have threaded our way through the dark, unhistoric centuries, to the time when the Malayalim and Tamil races were one, with one language and one mythology; to times before those when Brahmins wandered into Southern India, bringing with them letters and civilization; to times before Buddhism was, and before the founder of Christianity had appeared. And now the missionaries of the gospel are here, face to face, to-day, with one of the most rude and long-lived superstitions of the primeval world, and one which has resisted in turn both Brahmanism and Buddhism. Will Ayenar successfully resist Christianity also? We can at least say, as Paul said to the Corinthians, "The weapons of our warfare are not carnal, but mighty through God to the pulling down of strong holds." Hitherto the success of Christianity has been largest among the unbrahminized races. A hundred thousand converts from the Dravidian family are living within two hundred miles of Cape Comorin; one-fifth of the native state of Travancore is Christian; and confirming our faith by what has already been done, we confidently expect the day when Christianity shall take the place of this, one of the oldest superstitions in the world, and Ayenar—the lord—shall give place to him who was born to be Lord of lords and King of kings.

## THE FOUNTAIN OF YOUTH.

**BIMINI.** A poetic object figuring in the history of the discovery of the New World was *the fountain of Bimini*, situated on an island of the same name, hundreds of leagues north of Hispaniola. This fountain or source had the power of restoring youth and of giving perpetual health and vigor to the sick and decrepit; such was the firm belief of all the Indians of the Antilles, and even of the mainland of Central America. This fountain was probably one of the causes which prompted Ponce de Leon and Hernando de Soto to undertake their expeditions to Florida, for it was most generally supposed to be situated on the outskirts of this peninsula. Worship of sources and fountains is very common among all nations, but here we have a combination of this worship with the myth of an earthly paradise or "island of the happy." The name was variously pronounced, but when we adopt *Bimini* as the current form, this is composed of the two Timucua words: ibine, *water*, and mine, mini, which means (1) *great*, (2) *high*, and (3) *first*, prominent, superior; the second signification has also become a substantive, hill, mountain. Hence Bimini is a contraction of ibine and mine, mini, "water of superior quality." But the Timucua language, spoken along the eastern coast of Florida, was not the only idiom which furnished a name to the far-famed island and its fountain; they were known also by the Carib name Boiuca, a term easily identified with boyaicou, *magician, sorcerer, conjurer, shaman* (Raymond Breton, Dictionn. caraïbe-français, Auxerre, 1665; page 83); occurring also on the northern seaboard of South America in a hundred various forms (piaces, piajes, piacé, pajé, paggi, payé, etc.)

A. S. G.

## MANDARIN LANGUAGE.

A COURSE *for studying* the language of Chinese officials (or MANDARIN language) has been opened in Harvard University, Cambridge, Mass., on Oct. 22. This class is open to any competent person, and the lessons are given daily. The Chinese who come to America are almost all from the southern provinces of the empire, and do not understand this official idiom, which has its origin in the north and is understood in the more northerly ports, as Shanghai, Tientsin, Chefoo. The Mandarin language is the written language of China and the vehicle of Chinese literature, and the course at Harvard will therefore be available for the following persons: 1. Students wishing to acquaint themselves at first hand with Chinese history and literature. 2. Persons proposing to fit themselves for consular service in China, or for otherwise transacting business with Chinese officials, all of whom speak this idiom, whatever the local dialect may be.

A. S. G.

## ASIATIC ORIGIN OF THE BRAZILIANS.

Not very long ago the *Vicomte of Porto-Seguro* published a book on the Turanian origin and affinity of the *Brazilian Tupis*,\* by which he claims to prove the Asiatic origin of these Brazilian savages and their congeners, the Caribs and Guarani, by the comparative method of linguistics and ethnology. He has searched all the languages of the Orient and Europe to find a satisfactory clue for the origin of the Tupi, and finally found it in the easternmost of the Uralo-Altaic dialects of Siberia. All his linguistic facts are advanced only hypothetically and with caution, and it is very well for him to do so. The Ostiak Mongols had many Tupi words (page 142), for he finds that the Ostiak *kura canoe*, *birá river*, *aká*, *yeká* or *takai head*, *guma black*, *tsanga black* are the Tupi *igára*, *pará*, *akan*, *una*, *tinga*. The ancient Egyptians and the Carians of Asia Minor are to him Turanians also, and the latter, bold navigators and following in the wake of the Phœnicians, crossed the Atlantic several centuries before our era to establish colonies among the Tupis in Brazil. Thus he explains how the Egyptian To-Pan "the Pan of the home country," the Typhon of the Greeks, became the Tupan or God of Thunder in Brazil, and why the Tupi call themselves Cary-ós (progeny of the Carys) and the Galibí of the northern coast of South America Caribs or Cara-ibs. The only article of real value in this book is the seventh chapter, which contains a short extract of the Tupi grammar, taken from the early authors on the subject.

A. S. G.

## THE COPPER AGE IN MEXICO.

We have recently recorded the publication of an article by the Rev. Ed. Slafter on copper implements of Indian manufacture mentioned by authors of the 17th century. Soon after another learned article on a related subject appeared in the "Proceedings of American Antiquarian Society, April 30, 1879," the full title of which is as follows: *Philipp J. J. Valentini, Ph. D., Mexican Copper Tools: The Use of Copper by the Mexicans Before the Conquest*. [From the German, by Stephen Salisbury, Jr.] Worcester, Mass. Press of Chas. Hamilton, 1879. 8°, illustrated, 41 pages. In comparing the uses made by the Aztecs of copper products with those of northern Indians, as shown in a paper by Prof. Th. Egleston on Prehistoric Copper Mining at Lake Superior, it appeared "that both races were unacquainted with iron; both were trained to the practice of war, and, strange to say, both had invariably abstained from shaping copper into any implement of war. But the native of

\*Le Vicomte de Porto-Seguro: L'Origine Touranienne des Américains Tupis-Caribes et des Anciens Egyptiens. Vienne, 1876, 8vo., 156 pages.



Central America possessed copper implements for tilling the fields, and knew the uses of the chisel. The skilled workman of Tecocatega and Tezcucuo, subjecting the native copper to the heat of the furnace, cast the woodcutter's axe in a *mould*, as well as the bracelets and the fragile earrings that adorned the princesses of Montezuma; but the northern Indian simply took a stone, and by physical force hammered the metal into the required shape." The information on the use of metals in early Mexico to be derived from the Spanish authors who wrote within a century after the Conquest is rather scanty; but the Aztec pictorial manuscripts of the Kingsborough collection furnish an instructive series of pictures, which Dr. Valentini has exhaustively consulted in his able and interesting article on copper implements in use among the Aztecs and Central Americans.

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### EDITORIAL.

#### OUR CONTRIBUTORS.

We are happy to give to our readers the valuable contributions to archæology by our coadjutor, Prof. Merrill. Having been connected with the Palestine exploration survey, he is fully competent to give descriptions both of the geography and archæology of Palestine, especially that portion lying east of the Jordan. From his access to libraries and his extensive acquaintance he is also able to continue to give the results of the latest researches in this department. Rev. Drs. Crosby, Strong and Abbott, whose names we give by permission, will hereafter give to the JOURNAL, as opportunity and time permits, the results of their ripe scholarship. Rev. T. O. Paine is not so well known, but we are sure that his acquaintance with Egyptology is such as to make his contributions of great value. Rev. A. H. Sayce does not need any introduction. He is acknowledged to be the best Assyriologist in the world. We consider ourselves very fortunate in securing his coöperation, and, what is more, he promises to do all in his power to make the ORIENTAL JOURNAL a success.

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#### THE SCOPE OF OUR JOURNAL.

We have no doubt that many will welcome our journal as a valuable accession to literature and science. Our purpose is to show the correspondence between scientific investigation and scripture truths, and in whatever line this correspondence may be discovered, we shall consider that to be a province belonging to us. Oriental studies bring us into close contact with the Old

Testament record, but other scientific studies bring us also into contact with New Testament teachings. It will be understood from the double title to the JOURNAL that we intend to embrace a broad field. We hope that the magazine will be fair, candid, and scholarly, while it is thoroughly orthodox and evangelical. We think there is a demand for just such a journal at the present time, and we believe that religious people especially will not only realize the need, but will do all they can to support the enterprise of publishing such a work.

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#### NEOLITHIC IMPLEMENTS FOUND IN GRAVEL BEDS IN CALIFORNIA.

Prof. Whitney's reports on the auriferous gravels of the Sierra Nevada, published by the Museum of Comparative Zoölogy, describe numerous implements which have been discovered in the gravel. The list comprises (1.) A mortar found in pay gravel underneath the volcanic 150 feet,—locality San Andreas, Colorado Co., Cal.,—date, 1860 and 1869. (2.) A stone hatchet, triangular in shape, size four inches around, six inches long, *with a hole through it for a handle*, found 75 feet from the surface in gravel, and under basalt, 300 feet from mouth of tunnel, locality Table Mountain, Tuolumne Co., finder, James Carvin, date, 1858. (3.) A large number of mortars, pestles, *stone dishes*, with bones of mastodon and elephant in auriferous gravel, 10 to 20 feet below surface, locality, "Murphy," Tuolumne Co., Cal. (4.) Mortars, some of them weighing from 20 to 40 lbs. "in gravels" 40 feet deep, locality, Amodor Co., date, 1852, 1857, 1858 and 1864, now in Voy's collection. (5.) Stone mortars, one ten inches high and six in diameter, found at ten feet depth, others at a depth of 100 feet. (6.) Bones of a human skeleton, found in clay 38 feet below surface, finder, H. H. Boyce, M. D., 1853, Placerville. (7.) Oval stones with grooves around them lengthwise, implements used as handles for bows, hollow on one side and convex on the other, 5 or 6 inches long, one inch thick, locality, El Dorado Co. (8.) Large stone platters and a mortar made of granite, 15 inches high, and 12 inches in circumference; depth, 10 to 20 feet; also, a platter of granite 18 inches in diameter, locality, Placer Co. (9.) Numerous stone relics, mortars, pestles, and grooved disks at various depths; locality, Nevada Co. (10.) A stone mortar standing upright with pestle in it, apparently as it was left by the owner. Other mortars from half a dozen to a dozen or two, enough to show a large population; depth, 12 feet underneath undisturbed gravel, also several mortars on the top of blue gravel, and another in blue gravel, 40 feet below the surface; finder, Amos Bowman, dates

from 1853 to 1858. We have no opinion to express as to the antiquity or geological history of these relics, but our readers will notice certain points in the description which show that they are *neolithic* and not Paleolithic, and any inference as to their being signs of a "missing link" in the tertiary age is far fetched and unwarranted.

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WE are happy to give to our readers an account of one of the most ancient objects of worship of the far east—Ayenar, the Deity of the ancient Dravidians.

The inhabitants of India who preceded the Aryan race, were evidently a primitive people, who were hardly out of the so-called stone age, and were as near the prehistoric period as any eastern race known to history. The statue of the guards of this Divinity, portrayed in the picture which forms our frontispiece, is probably comparatively modern in its origin, but the Divinity himself was very ancient.

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#### THE TESTIMONY OF THE MONUMENTS.

The various schools of biblical criticism, both in Great Britain and upon the Continent, are at present at variance with the discoveries of archaeology in Oriental and Biblical lands. The Pentateuch is especially the object of variance. The destructive criticism of these schools, without any prospect of an answer, has assumed to take away all the land-marks by which we could assign these books to the age of Moses. Egyptian scholars however, have replaced them as fast as they have been taken away. The latest works, such as that of Brugsch, Lepsius, Mariette, consider the Pentateuch as of prime historical importance. Reginald Stanley Poole has published a number of interesting articles in the *Contemporary Review*, on Ancient Egypt, in which he undertakes to answer the question, "What do the Monuments tell us of Joseph and Moses, of the settlement in Egypt, and the sojourn in the Exodus?" The first result is a general agreement as to the date of the Exodus. The general opinion has been that it occurred about 1491. Lepsius' theory places the event toward the close of the fourteenth century. Secondly, the date of Joseph. This event would fall before the eighteenth Dynasty, in the latter part of the Shepherd Dominion, before 1700 B. C. The subsequent oppression would have been a consequence of the expulsion of the Shepherds. It is precisely in the later part of the Shepherd Dominion that Dr. Brugsch finds the record of a famine of many years duration. The story of Joseph is illustrated, step by step, from the Egyptian texts. The tale of the Two Brothers, an Egyptian fiction, has for its

turning point an incident identical with the trial of Joseph. Pharaoh's dream of kine describes the years of plenty and famine under the usual type of the inundation. The installation of Joseph has its parallel in the case of an Egyptian governor of the age of the eighteenth Dynasty, who received exactly the same office, "Lord of all Egypt." The expression "by the life of Pharaoh," and the custom of bowing upon the staff, are traced by M. Chabas, as usual, in the judicial proceedings, and similar to the ordinary oath when the witness bowed on the magistrate's staff of office. These descriptions of Egyptian life and customs, so confirmatory of the Scripture record, are very interesting at this time. It is certainly improbable that writers would so minutely describe the circumstances so true to life, unless they were living at the time, and were eye-witnesses of the facts.

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### **GLEANINGS FROM MAGAZINES.**

#### **THE RELIGION OF TO-DAY.**

A writer in the *North American Review* for December has given the following as a summary of the dangerous points to which the religions of the present are tending, points which any one may see, have great interest to the orientalist as well as the scientist, as many of them evidently have their origin in oriental sources. He says there is no difficulty in telling them off. The personal deity, a relic of old Jupiter; man a highly developed animal, having the same origin of the brutes from which he sprang, and distinguished from them only by the developement of certain ideas; Heaven, the fairy-land of the infant race; Providence, its Santa-Claus; the Bible, a collection of ancient poetry; the divine law, a natural growth in the minds of men; conscience, right, and duty, products of the natural development of humanity; no divine punishment for sin or reward for virtue except through their natural consequences, as brought about by the laws of nature, or the impulse of mankind; the future life a beautiful dream, from which we would fain not wake. The same writer says that the great pall which evolution throws over the hopes of the more elevated class of humanity is the skepticism which it engenders respecting the personal immortality of the individual soul. If man is simply a developed animal, why should he hope for any other than an animal existence? The development of the lower animals and the process of evolution has been almost entirely a physical one, but humanity has exhibited a growth of an entirely different character, in moral and intellectual qualities. Looking at the matter from this point of view, and considering the evolution of the moral sentiments as

the greatest step in the progress of animated nature, we may see that a new species of animal has begun to rule the world within quite recent times. This animal we call the refined christian gentleman of modern society. He was not unknown in the past, specimens being seen in the Platos and Alfreds, who adorned the history of their times. As the world grew in enlightenment this being began to modify the laws under which men live, and now he has made his way into the church so quietly that no one sees a change. We might take the standard of excellence offered by this being as one of the most striking examples of the drift of modern thought.

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#### SACRED BOOKS OF THE EAST.

An article in the *North American Review* for June, by Max Müller, contains a defense of the Sacred Books of the East. It has been for many years a problem how these books should contain, by the side of so much that is fresh, natural, and simple, beautiful and true, so much that is not only unmeaning, artificial, and silly, but hideous and repellant. There are those christians who look at all religions except their own as the necessary outcome of human ignorance and depravity, but there are others who, more reverent, can feel a divine afflatus in other religions. 1. Most of the ancient sacred books were handed down by oral traditions for many generations, so every saying, every proverb, every story soon received a hallowed character. Some of these ancient sayings were preserved because they were so true, and of such it was said in India that they had been heard (*sruta*), and so they were recognized as divine revelation. 2. Besides these utterances there were many others which struck the minds of the hearers at the time with great force, but when the circumstances were forgotten they became trivial and almost unintelligible. Thus oral tradition, while it was a faithful guardian, was not a discriminating transmitter of truth. The progress was from the patriarchal and personal tradition to the priestly code. 3. Afterward religious founders arose. It does not answer to say that if Zoroaster was the wise man he is represented to be, we could not have found the rubbish which we find in the Avesta. The text of the Avesta or Veda or Tripitaka formed the foundation on which during many centuries the religious belief of millions of human beings was based, and it may be well for us to ascertain how these books originated, and how they exercised their influence. It may seem strange to us, judging from a purely æsthetic view, that they are what they are, but it must be remembered that western expressions offend eastern taste, as well as eastern expressions are apt to offend western taste. 4. The translations of these sacred books do not

give fair representations of the original. Behind the fantastical and whimsical phraseology there may be sometimes aspirations after truth which deserve careful consideration. With the life we are leading now, with telegrams, letters, newspapers, reviews, pamphlets, and books ever breaking in upon us, it has become almost impossible ever to arrive at that intensity of thought which the Hindoos meant by *ekâgratâ*, and the attainment of which was to them the *sine qua non* of all philosophical and religious speculation. By means of repeating the syllable *om*, signifying yes, they arrived at a certain degree of mental tranquillity, until the mind was led up to higher and higher objects. *Om* became the name of all physical and mental powers, but especially of the living principle or spirit. None of the Vedas, with their sacrifices and ceremonies could ever secure the salvation of the worshipper, but the knowledge of what is meant by *om* alone can procure true immortality.

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“ANALOGIES BETWEEN CALVINISM AND DARWINISM.”

Rev. George T. Wright has an article in the *Bibliotheca Sacra* for January, on the above subject. To those who believe that the material creation, the mind of man, and the sacred scriptures are all the productions of one author, it will not be surprising to find a thread of analogy running through the three departments of knowledge. Thus Paul, Augustine, and Darwin, may each be the discloser of truth, each in his own department, and so Calvinism and Darwinism also may be analogous. 1. The doctrine that man was made upright, but fell from his first state, is confirmed by the theory that there is an extinction of species, as well as a production, a degradation, as well as advancement. An organ can be of advantage only as it is in harmony with its environment. The imposition of a moral faculty upon man's physical organism brought in a source of danger, even as the elephant's weight is a disadvantage in a miry ground. His desires outstrip the earthly means of gratification. 2. The doctrine of hereditary transmission of sinful tendencies, and the scientific theory of heredity are also analogous. Adam was not only a progenitor, but a root, by whose corruption the whole race is vitiated. 3. The doctrine of divine decrees is analogous to the theory of correlation of forces. All organized beings have to put up with such accommodations as the reign of general laws will allow, and the divine power itself is limited by the nature of things. There is a revelation of method and order in nature as well as in man. Christ would save souls, but he subverts the order of God's moral kingdom. The maintenance of the order developes the race, though individuals may be lost. 4. The doctrines which have to do with the mysteries of man's

being are analogous to the theory of ontology. The creation, or propagation of the soul life, and the transmission of moral character are not different from that of the propagation of the species and the transmission of inherited qualities. There is a mystery in them both.

#### METHOD FOR THE THEOLOGICAL USE OF THE BIBLE.

By A. Duff, Jr., Professor in Ayrdaile College, Bradford, England, in the *Bibliotheca Sacra* for January, 1880. The science of religion contained in the Bible is made up of a series of phenomena, and the work of theology is to give a systematized knowledge of the facts. The religion of the Bible is not a mathematical science, but should be classed rather as experimental. Each one who has formulated the truths of religion has had a subjective character which influenced his work, even if he gave an absolutely correct result. 1. The theological use of the Old and New Testaments is gained first by a careful analysis of what the men were who wrote the different books. It is not to search for words and sentences as proof texts to be arrayed and explained, but is rather to construct carefully the religious thought of each writer, on the system peculiar to himself, then to eliminate from them all coloring which is clearly a peculiarity of each, and accurately discover the truth at the basis of all. 2. A knowledge of the progress of thought as manifest in the Old and in the New Testament writers, compared with circumstances in which they moved. The picture of the religious features of successive ages are given in the reports of the prophecies uttered and the poetry written, as well as in the historical narrative. The prophecies were like sermons, fruits of the age in which they were spoken. They contained the religious history of the people, as well as their thoughts. 3. The philological study of scriptures. The history of the language, must be known, as well as its principles. To one who has no thorough knowledge of language, the difference between the first and second chapters of Genesis would be unnoticed, just as the difference between Chaucer and Tennyson would by some be unobserved. The author states a singular fact concerning the article in the new edition of the Encyclopedia Britannica entitled "Bible." The author is W. Robertson Smith, Prof. in the Theological College of Aberdeen. He, following the opinion, it is said, of those most thoroughly trained in philological studies in Europe, assigns the date of the book of Genesis to an age no earlier than David, 1055 B. C., three hundred years later than the emigration. The committee appointed by the Free Church of Scotland to consider the article, made a report that the position taken by the author was not inconsistent with orthodoxy.

A NEW "TESTIMONY OF THE ROCKS;" OR, THE CUNEIFORM INSCRIPTIONS AND BIBLICAL HISTORY IN THE OLD TESTAMENT.

By Rev. B. M. Smith. From the *Southern Presbyterian Review*, for July. In the tenth chapter of Genesis Moses has given us the "generations of the sons of Noah." Recent investigations of antiquarians, both into the history and languages of western Asia, by the aid of the cuneiform inscriptions, have led the best ethnologists to accept these "*Toledoth* (generations) of Noah" as a most admirable and trustworthy basis for the earliest histories of our race. We are not informed how long Noah and his sons and families and his descendants remained in Armenia. They became Nomadic (Genesis xi-2.) 1. The scriptures do not state the exact time when the beginning of Nimrod's kingdom occurred, nor when Ashur went forth, nor the date of the building of the tower. An inscription on the rock at Bavian, on the Tigris, made by Senacharib, about 692, speaks of his having recovered certain Gods, which had been carried away 418 years previously, that is, 1110 B. C. Other inscriptions found at Shergat give an account that, during his reign, Tiglath-Pileser had rebuilt a temple which had lain in ruins 60 years, and that this temple had been built 640 years previous to its re-construction, all falling into ruins. It was then built 1810 B. C. The most trustworthy opinions derived from Berosus, Callisthenes, and other sources, do not give entirely satisfactory results, respecting the period from 1810 B. C. to the beginning of Nimrod's kingdom. The earliest monumental king is Uruch, who styles himself "King of Ur," who built a temple in honor of Bel-Nimrod, or Nimrod of scripture. He is identified by Rawlinson with a God called Bel-nipur, or, as he renders it, "the hunter Lord." So far as these monumental data aid they confirm the scriptures in assigning the beginning of the kingdom of Babylon to Nimrod. Uruch was, perhaps, "King of Ur," a tributary to Nimrod, and then his successor. The accounts of Berosus and others, based on his reign, assigned 2234 B. C., as the time of the beginning of Nimrod's kingdom.

2. The period of Asshur's emigration was subsequent to Nimrod's work. "Asshur was the name of the God, of the founder of the kingdom, of the country, of the town (long the capital), and of the citizen." Corroborating these direct confirmations of the history of Moses, are some rather inferential yet sustaining illustrations of its entire correctness. It is well known to readers on the subject that in the ruins of Babylon are found but few



stones. Bricks, baked by fire or sun-dried, were evidently the almost exclusively used material. In the region of Nineveh, there has ever been an abundant supply of the best building stone, yet the same mode of preparing a foundation, and the same extensive use of brick are evinced by the ruins. The Assyrians derived their plan of building from the Babylonians. All the grounds of this rejection of the Mosaic testimony are removed by the monumental records. The inscriptions on the bricks, by their position at the base of Babylonian ruins, evidently the most ancient, present a language very different from that of later periods. The archaic language of Chaldea has now been proved, from the sources above mentioned, while predominantly of the Cushite family, to have also contained distinctly marked elements of the Turanian (Scythic), Aryan, and Semitic families of language. It is evident, in spite of Bunsen's sneers at believers in the Bible history, *there was an Asiatic Cush*.

3. For many centuries after the "beginning" of Nimrod's kingdom, and the "building" of Nineveh, there were alternately wars and seasons of peace between the people of Chaldea, or Southern Mesopotamia, and those of the Northern Mesopotamia. The Chaldean kingdom is supposed to have existed eight or ten centuries before the Assyrian people succeeded in establishing their independence. Then the inscriptions give us notice of alliances as well as disputes. The independence of Assyria was followed by its greater prosperity, until, from a comparatively unimportant kingdom it grew to the dimensions and power of an empire, and ultimately first subdued its rival, and then absorbed its territory into its own. In the annals of the Assyrian monarchs, statements of warlike expeditions and conquests of various nations are presented. In most cases these monarchs had already become somewhat known in history, and also a knowledge more or less definite of the period in which they flourished, already existed. In such cases, and by frequent recurrence of the name of the monarch, little or no difficulty in the identification occurred. The Assyrians appear to have kept a current chronology, to which the title "Assyrian Epouym Canon" has been given. This was the indication of every year by the name of a king, or some other eminent and well-known person. Fragments of such a canon have been discovered, deciphered, and arranged in tolerably good order. Assyrian scholars have identified in this record several names of persons of eminence; they have thus adapted to it the chronology of the Synchronous period, as given by Grecian or scripture authorities; thus the canon has become a valuable contribution to the settlement of many questions in the history of this remote past of the world, from 920 to 688 B. C.

4. The first case of an Assyrian invasion of the Holy Land recorded

in the scriptures, is as follows, second Kings, xv, 19-20: "Pul, king of Assyria, came against the land, and Menahem gave Pul a thousand talents of silver, that his hand might be with him to confirm the kingdom in his hand." The name of Pul does not occur either in the Assyrian canon, or in any monumental inscriptions of Assyria. Mr. George Smith, in the Assyrian canon published shortly before his lamented death, favors the opinion that Pul is the name of a monarch first read as Vullush, or, more correctly, Vul-nirari. The earliest period in which Pul could be a contemporary of Menahem is 773 to 771 B. C. The next monarch who came to carry on the subjugation of the kingdom of Israel was Tiglath Pileser (in one monument the record read Takutipalesar, and, in another, Tagultipalesar.) The Assyrian authorities, copied by the best scholars, assign the accession of this monarch to 747-745 B. C. It was evident, from his inscriptions that he had much intercourse both with the rulers of Israel and Judah. Next to Tiglath Pileser appears Shalmaneser IV, mentioned in second Kings, xvii, 3. On an obelisk, in the ruins of Nimrod, there are bas-relief representations of captives loaded with spoils, such as Jews might be supposed to bring, which are assigned to the time including the period of Shalmaneser. As Shalmaneser reigned only six years, the bulk of conquest was carried on by his successor, Sargon, whose voluminous annals are now before us. "Samaria I besieged, I conquered; 29,290 people dwelling in the midst of it I carried captive; fifty chariots from among them I selected, the rest I distributed." Sennacherib, the great king, king of Assyria, succeeded his father Sargon. We have very full monumental records of Sennacherib. The narrative of his relations to Judah, opens thus: "Because Hezekiah, king of Juda, would not submit to my yoke, I came up against him, and by force of arms I took forty-six of his strong fenced cities, and of the smaller towns I took and plundered a countless number. Hezekiah himself I shut up in Jerusalem as in a cage; building towns around the city to fence him in, and raising banks of earth against the gates, so as to prevent escape." Next Eser-Haddon ascended the throne. He ruled over both kingdoms, Assyria and Babylon, having his palace in Babylon. Towards the close of his reign he abdicated his throne in Ninevah in favor of his son, and ruled in Babylon alone. The inscriptions of Eser-Haddon give us evidence concerning the record in second Chronicles, xxxiii, 3. Eser-Haddon mentions Manasseh as one of twenty-four kings brought before him, as it seems, for review. No historical annals of Nebuchadnezzar's, like those of his predecessors, have yet been discovered. But, though Nebuchadnezzar left no historical annals that have come to light, his account of his great buildings, fortifications, canals,

and reservoirs, of which remains are still traceable, and the immensely greater number of bricks stamped with his name than of any other, are strikingly illustrative confirmations of the notices of his greatness contained in the Bible.

5. For a long time the confirmation of the scripture account in Daniel, chapter v, derived from profane writers, failed to explain the apparent discrepancy with profane history, in that the name of Belshazzar is not mentioned by any author. Nabonadius is the name of the king ruling Babylon when taken by Cyrus. No satisfactory method of identifying Belshazzar with him or any other had been proposed. Now, however, on the cylinders of Nabonadius, discovered in the ruins of Mugheir, we find an inscription, mentioning the association of Nabonadius and his son Belshar-uzur, in a prayer, asking the protection of the gods for them, in terms indicating the co-sovereignty of the son.

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#### THE HEBREW LANGUAGE—ITS SPIRIT AND CHARACTERISTICS.

By Prof. B. Maimon, in the *Universalist Quarterly* for January. The Hebrew language is prehistoric. It was the language of Canaan before Abraham entered that country. Its name leads us back to ten generations before Abraham, to Eber, the grandson of Shem, who, it would seem, was the ancestor of the Ebrews. In Genesis, the oldest book in the Bible, we find various traces of a pre-Mosaic literature; namely, the most diversified development—the formation, the variety, as well as the precise use of words, and especially the constant use of a certain phraseology (style), moulded and framed by conventional laws, underlying them. (1) The Hebrew language presents this remarkable paradox, there are no vowels in it, and yet not a single consonant can be uttered except in conjunction with a vowel. This absence of vowel-signs is also true of all other Shemitic languages up to about the seventh century A. C., except the Ethiopic. And the fact that the text of the Old Testament had no vowels until towards the end of the seventh century—(thus the consonants *lvr*, for instance, could be pronounced "lever," "lover," "laver," "liver," etc.), has shaken the faith of the merciless critics of the German school of exegesis, in the correctness of the text. But when we remember that this language, while most imperfect in its orthography, was yet spoken by about two millions of people, and that the Pentateuch was read to almost all the males on every Sabbath, we have to conclude that they had a greater familiarity with the pronunciation of the text, without the vowel signs, than we have, in spite of all the subtlety

of the pedantic Matorites. It is the interior, unseen power, which causes language to live and breathe, as it were, and without which, language would be a mere bony skeleton. (2) One prominent characteristic of this language is its intimacy with nature, from which it drew with very great effect. Almost every word is a picture, presenting to the mind some action of the outer world, painting some natural image upon the soul of man. Almost all of this language, with all its profuseness of expression, exhibits action. Nature, then, is the language of God, and reveals to us the character of God. In the primeval ages, nature itself was the Bible; and to the people of that time—bound to nature with a thousand chains—it is an open book. But as man became more and more estranged from nature, truth was imparted to him in audible language. And this language, that it might be a container of Divine wisdom, must be in accordance with nature, must be nature itself in a pictorial form. (3) Another characteristic is that it has no present tense. Everything is represented as living, moving in a never-ending onward movement. Thus the Bible is the stage of its own history, and this it is which gives it freshness. Thus Moses invites us, as it were, to the Pisgah of prophecy, and there bids us pause. (4) Another feature soliciting our attention is *external harmony between words* internally related. The word translated *to touch* is almost the same as that translated *to strike*. Parallelism is the distinctive feature of Hebrew poetry. It used this form more and with greater effect than any other. The literature of this language is the literature of the human heart—"a diary written by the spirit of God concerning the mysteries of the human heart." There is much imagery and inspiration in this language, and in its literature, that moderns might well seek to become familiar with, in order to get the blessing of beauty and life that is there, waiting to pass into the appreciative soul.

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#### POINTS OF CONTACT BETWEEN SCIENCE AND REVELATION.

By Prof. J. W. Dawson. *Princeton Review*, July-December. This paper relates to those points in which modern scientific investigation has come in peaceful contact with the revealed word of God. There is, perhaps, the more necessity to refer to such points of contact, because many of them lie out of the way of ordinary students of nature or of the Bible, and so are likely to be overlooked.

EDEN. Perhaps no portion of the Bible history seems to have been more thoroughly set at naught by modern scientific speculations than the Golden Age of Eden, so dear to the imagination

of the poet, so interwoven with the past condition and future prospects of man, as held by all religions. On the other hand, it can easily be shown that there are important points of agreement between the simple story of Eden, as we have it in Genesis, and scientific probabilities as to the origin of man. It seems plain that the condition of our earth, in all those long periods when it was inhabited by inferior animals only, was unsuitable for man. Man is thus a recent animal in our world. The external conditions must have been suitable to him before he could appear. It would be altogether improbable that these favorable conditions should prevail at one time over the whole world. They must, in the nature of things, have prevailed only in some particular regions—an especial center of creation of man. There is, therefore, in science, nothing inconsistent with the scripture statement that God prepared a place for man. He must have commenced his career naked, destitute of weapons and clothing, and with only such capacities for obtaining food as his hands and feet could give him. For such a being it was absolutely necessary that the region of his debut should furnish him with suitable food, and should not task his resources as to shelter from cold and defense from wild animals. We should look for the center whence men have spread to those regions in which they can most easily live, and in which they have most multiplied and prospered. In historical times these indications, and also those of tradition, archæology, and affiliation of languages and races, point to Western Asia as the cradle of man. Even Haeckel in his "History of Creation," thought it convenient, in connection with his theoretical views, to assume the origin of man in a region somewhere in the Indian Ocean and now submerged; traces all his lines of affiliation back to the vicinity of the Persian Gulf, in the neighborhood of the districts to which the Bible history restricts the site of Eden. Again, there is reason to believe that at the fall of man, climatic or other changes, expressed by the "cursing of the ground" occurred, and that in the Edenic system of things very large portions of the earth were to be or become suitable to the happy residence of man. Geology makes us familiar with the fact that such changes have occurred in the later half of the tertiary period, to such an extent that at one time the plants of warm temperate regions could flourish in Spitzbergen, and at another, ice and snow covered the land far into temperate latitudes. Farther, it would seem that the oldest men known to us by archæological discoveries, probably equivalent to the antediluvians, lived at a time of somewhat rough and rigorous climate, and which probably succeeded a more favorable period in which man appeared. From this Eden, man was expelled, the old Ayran traditions say

by physical deterioration—the incoming, perhaps, of a glacial age. The Semitic traditions, on the other hand, refer it to a moral fall, and a judicial visitation of God. In any case it was a very real evil, involving a change from that condition of happy abundance and freedom from physical toil, which all histories and hypotheses as to human origin must assign to the earliest stage of our species, to a condition of privation, exposure, labor, struggle for existence against the uncongenial environments of a wilderness world.

CREATIVE DAYS AND THE SABBATH. It has long appeared to me, and I have elsewhere endeavored to illustrate this idea, that the long creative days of geology throw a most important light on the institution of the weekly Sabbath, and its continuance as the Lord's day. If it is true that the seventh or Sabbath day of creation still continues, and was intended to be a day of rest for the Creator and his intelligent creature, man, we find in this a substantial reason for the place of the Sabbath in the Decalogue, and through our Lord's declaration in reply to the Pharisees, "My Father worketh hitherto, and I work," and the argument in the fourth chapter of the Hebrews, can carry it forward into the Christian dispensation. If it is meant that God worked on six natural days and rested on the seventh, the question arises, what is he doing on subsequent days? Does he keep up this alternation of six days' work and one day's rest, and if not, how is this an example to us? If it is argued that the whole reason of God's six days' work and one day's rest was to give an example, this conveys the absurdity of doing what is infinitely great for an end comparatively insignificant, and which might have been attained by a command, without any reason assigned. But let us now suppose that when God rested on the seventh day he entered into an æon of vast duration, intended to be distinguished by the happy Sabbatism of man in an Edenic world, and in which every day would have been a Sabbath; or, if there was a weekly Sabbath, it would have been but a memorial of a work leading to a perpetual Sabbath then enjoyed. Let us farther suppose that at the fall of man the Sabbath-day was instituted, or obtained a new significance as a memorial of an Edenic Sabbatism lost, and also a memorial of God's promise that through a Redeemer it would be restored. Then the Sabbath becomes the central point of all religion, the standing and perpetual memorial of an Eden lost and a paradise to be restored by the coming seed of the woman. If the latter had a reference to Sabbatism lost by the fall and restored by the Redeemer, the Son of Man must be "Lord of the Sabbath" in the sense of fulfilling and realizing its prophetic import. Therefore, the day on which he finished and entered into his rest must of necessity

be that to be commemorated by Christians, until the time when the return of Christ shall inaugurate that final and eternal Sabbathism which remains to his people.

**ANTEDILUVIANS.** The deluge of Noah has ceased to be a matter solely theological, or dependent on the veracity of Genesis. It has now become a fact of ancient Assyrian history, a tradition preserved by many and various races, a pluvial or diluvial age, or time of subsidence, intervening between the oldest race of men known to geology, and modern times.

The human family, at a very early period, split into two tribes. One of these, the Sethidæ, simple, God-fearing, conservative, shepherds and soil-tillers; the other, the Cainidæ; active, energetic, godless, city-builders and inventors. Among the Cainidæ sprang up another division into citizen peoples, dwelling in dense communities, practising metallurgy and other arts, inventing musical instruments, and otherwise advancing in material civilization; and wandering Jabalites—nomads, with beasts of burden and movable tents, migrating widely over the earth, and perhaps rudely descending to the rudest forms of human life. Thus from the center of Eden and the fall, sprang three diverse lines of human development. But a time came when these lines reacted on each other. The artisans and inventors intermarried with the simple country folk. The nomadic tribes threw themselves in invading swarms on the settled communities. Mixed races arose, and wars, conquests and disturbances, tending to limit more and more the areas of peace and simple plenty, and to make more and more difficult the lives of those who sought to adhere to the old Edenic simplicity; until this was well-nigh rooted out, and the earth was filled with violence. In the midst of this grew up a mixed race of men, strong physically, with fierce passions, daring, adventurous and cruel, who lorded it over the earth, and deprived others of their natural rights and liberties—the giants and men of renown of antediluvian times. Another feature of the antediluvian time was its godless and materialistic character. This is quaintly represented in some of the American legends of the deluge by the idea that the antediluvian men were incapable of thanking the gods for the benefits they received. It is an interesting fact that those ancient cave-men, whose bones testify to the existence of man in Europe, present characters such as we might expect to find at least in the ruder nomadic tribes of the antediluvian men. Their large brains, great stature and strong bones point to just such characters as would befit the giants that were in those days. It is further of interest that the only appearance of skill in the arts of life in the valleys of the Euphrates and Nile in post-diluvian times points to an inherit-

ance of antediluvian arts by the early Hamitic or Turanian nations, and is scarcely applicable on any other hypothesis.

THE EXODUS. Modern geographical exploration has gone over the ground traversed by ancient expeditions, or famous from wars and sieges, with various results as to the historical credibility of the narrators of these events. Bible history has often and in many places been subjected to this test, and has certainly been remarkably vindicated by the spade and the measuring line. But perhaps no incident of this is more remarkable than that afforded by the magnificent report of the Ordinance Survey of Sinai, both because of the positive and clear character of its results, and of the antiquity and obscurity of the events to which it relates. As we follow the laborious investigations of the surveying party, and note the number and complexity of the undersigned agreements between their observations and the narrative in Exodus and Numbers, as we study their account of the geology, productions and antiquities of the country, trace its topography on their beautiful maps and photographs, and weigh their calculations as to the supplies of water, food and pasture, at different stages of the journey, we feel that the venerable narrative of the Pentateuch must be the testimony of a veracious eye-witness, and all the learned theories as to a late authorship and different documents disappear like mist. The writer of Exodus and Numbers had no idea that after thirty centuries his veracity was to be subjected to the test of a scientific survey; but he has, nevertheless, so provided for this that even the obscurities, imperfect explanations, and omissions now tend to his vindication. The authors of the Report on the Sinai Survey make no pretensions to be either critics or expositors of the Bible, and they are prepared to state what they see, independently of the consequences to any one. Hence it is most instructive to observe how, as they unsparingly sweep away old traditions, and the conjectures of travellers and historians, ancient and modern, the original record stands in all its integrity, like the great stones of some cromlech, from which men had dug away the earth under which it had been buried. To those who have placed reliance on such theories of the Pentateuch as those of Kalisch, Kuenen, or Colenso, the disclosures of the survey of Sinai must come like a new revelation. Henceforth the only rational theory as to the composition of the books of Exodus, Leviticus and Numbers, is that they are contemporary journals of the events to which they relate, and that they have not been subsequently revised or altered even to such an extent as to explain facts obscure to any one except a contemporary, or to remove seeming contradictions requiring knowledge of the ground for their solution.



### FRESH ASSYRIAN FINDS; TRIUMPHAL BRONZE GATES OF SHALMANESER THE GREAT.

By Basil H. Cooper, in the *Sunday Magazine*—republished in the *Library Magazine*. We none of us need to be reminded that our religion, although meant for all nations, is of Oriental origin, and that even the New Testament, whose very language is Greek or Western, whence we are daily learning it, is best read and understood in the light of the rising sun. Most would acknowledge that in no other light is it intelligible at all. The reader hardly needs to be reminded how marvelously the Bible accounts have been confirmed to the letter, as well as illustrated and supplemented by the contemporary cylinders and tablets unearthed by our Bottas and Layards and interpreted by the daring erudition of many an *Edipus*, such as Hincks, Norris, Fox, Talbot, and George Smith, amongst the dead, with their survivors, Oppert and Rawlinson, of the first generation of Assyriasts, and Sayce and Schröder of the second.

Some recent discoveries especially have furnished such confirmation. It was at the end of 1877 that the Trustees of the British Museum, having resolved on the resumption of Mr. George Smith's renewed exploration of the Assyrian mounds, entrusted the enterprise to Mr. Rassam. Many years before he had been successfully engaged in the same work, under the direction of Sir Henry Rawlinson, and accordingly the results to which he could point on his return in the following autumn not only fully justified the confidence with which he had already been honored, but led to his being sent out again, after a rest of a few weeks, armed with far larger powers and a widely extended commission. He had naturally, following Mr. George Smith's lead, begun with ransacking once more the debris of the royal libraries in the Kouyunjik mound, where Nineveh once stood, opposite the site of the modern mound. The fresh search was rewarded by the recovery of about 1,500 new Cuneiform fragments, most of which are sure to be found to fit others already in the British Museum. In a corner of Assurbanipal's library Mr. Rassam found a beautiful decagonal cylinder, inscribed with the annals of that king down to his twentieth year, each of the ten faces running to a hundred and twenty lines. Proceeding to Nimrod, a score of miles down the Tigris, he reopened the trenches abandoned by Sir A. H. Layard thirty years before, and brought to light portions of the palace of Assurnazirpal, the father of Shalmaneser II., as well as the temple of Istar, the Assyrian Venus. It was during his excavations here that tidings reached Mr. Rassam which awakened his keenest interest. At the mound of Balewat, about nine miles

to the northeast of Nimrod, some Arab grave-diggers, in plying their calling, had unearthed a number of ancient bronzes. By an extraordinary coincidence, it so happened that several years before he had come into possession of a couple of Assyrian bronze fragments of just the same kind, which had been found at this very spot, and two or three other pieces had been bought by a French archæologist, M. Schlumberger, of Paris. The latter were shown in the Trocadero at the late Paris exposition, and were described by M. Lenormant in the *Reveu Archæologique*. They join Mr. Rassam's pieces.

It may be imagined, therefore, how eager Mr. Rassam was for closer acquaintance with an old friend. Taking with him a large staff of his workmen, he lost no time in making his way to Balawat, and, though annoyed at times by riots amongst the Arabs for disturbing a Moslem cemetery, succeeded, partly by good temper, and partly by making the best use of the Sultan's firman, in making extensive excavations on the hitherto virgin site. The mound may be described as pretty nearly rectangular in shape, and its corners may be said in a general way to be turned toward the four cardinal points of the compass. It represents an ancient Assyrian city, which, before the reign of Assurnazirpal, father of Salmaneser II, was known by the name of Kharuta. Though very near to Umcilao, the old Assyrian capital, it had been taken and held by the Babylonians during the long period of the rival empire's political decline. But when Assurnazirpal came to the throne, which he held from B. C. 885 to B. C. 860, he soon showed himself a great warrior, not only by expelling the invaders from his country, but by the recovery of long lost conquests, reviving in ancient glories. He ruled from the Zagros mountains and the Armenian lake Van, as far as the Lebanon range and the Syrian coasts of the Mediterranean. Aramæa, Mesopotamia, and Babylonia he brought under his yoke. To the recovered city, now marked by the ruins at Balawat, he gave the name of Imgur-Beli, "the fortress of Bel," and with the stones of a deserted palace, built a temple to the war-god Makhir, or Adar, as the name is read by some, near the city's north-east wall. These facts are recorded on alabaster tablets which Mr. Rassam found in a coffer made of the same material, deposited beneath the altar of the temple itself. They shed a fresh and welcome ray of light on the period of decay which preceded the reign of this monarch, and which has always been one of the darkest in Assyrian history. In the opposite or western half of the Balawat mound were laid bare four stone platforms, making the sides of an irregular square. It was here that the bronze fragments had been lighted on by the Arab grave-diggers, and, by further and more system-

atic excavations round these platforms, carried on with the utmost care, immense plates of that metal, covered with historical bas-reliefs in *repoussé* work, were taken out bodily. The most perfect specimens were about  $8\frac{1}{2}$  ft. long by about 1 foot broad, the historical representations ranging in an upper and lower tier. The subjects treated on these plates are Shalmaneser's battles, sieges, triumphal processions, the tortures inflicted on his prisoners, acts of royal worship, and his marches through difficult countries—over hill and down dale, as well as across the Tigris and other dangerous rivers, both out and home. It was not until their arrival at the British Museum that these bas-reliefs were recognized as having originally ornamented an immense pair of rectangular folding gates, probably of cedar, each leaf being about 22 feet high, 6 feet broad, and 3 inches thick. The height was deduced from the length of the two strips of bronze edging found with this set of bas-reliefs, which it was seen must have been nailed upon those portions of the gates where they clipped, and which are technically called the "styles." The "style" bronzes are inscribed with a history in duplicate of the first nine years of Shalmaneser's reign, these inscriptions on the vertical edgings thus furnishing the text, to which the chasings on the fourteen *relievi*, seven for each leaf, nailed horizontally across the gates at equal distances, add most artistic and telling instructions.

The door posts were cylindrical, and about a foot and a quarter in diameter, as is inferred from the existing bulge of several of the best-preserved horizontal plates, which at that end are shaped like a drum. Between the inner edge of the drum and the style the distance is  $4\frac{1}{4}$  feet, as measured in the writer's presence by the British Museum expert, Mr. Ready, who was the first to identify, as a pair of gates, this unique and grand Assyrian monument which, added to the diameter of the drum, gives a total breadth of six feet for each leaf, as above. The pivots are at the Museum, but the sockets and rings are unfortunately missing. The inscription on the "styles," although fuller for the period it embraces than the other great historical texts of Shalmaneser II., is found to be very carelessly engraved, besides neglecting the strict chronological order of events. As yet it has only been very partially translated. Of the horizontal chased bands a large proportion are in a sadly fragmentary state. The subjects are nearly always indicated by short legends accompanying the pictures. Beneath either legend is depicted, in the same noble style of art characteristic of the monument throughout, the beleaguering of the wall by the Assyrian hosts, and from the arrangement of scenes to right and left of Shalmaneser's camp, it is thought that the two sieges

must have been going on at one and the same time. Parga, to the left, seems to have been the stronger of the two, since it is attacked by the battering-ram, which, armed with its formidably pointed head, is seen advancing up the slopes of the hill crowned by the battlemented towers. On the other side a strong body of archers, protected by an immense covering shield, are drawing the bow against the garrison. The chariots with their prancing horses and exulting warriors seem to have cleared the way, like cavalry in the times before artillery suppressed its functions, for these decisive operations. In the siege of Ada the King himself shoots the arrow against it. The legend over the lower row of bas-reliefs reads, "The city Karhar of Wrkhileni, of the Hamathites, I took."

It was near this important city, on the river Orontes, which has been identified with Aroer, that as will be recollected, the decisive battle of the campaign was fought. Here then, we have, for the first time before our eyes in a contemporary work of art, the very scene and catastrophe, so to speak, of the tragedy in which Ahab and Benhadad were conspicuous actors. The drama has its beginning, middle and end. In one Assyrian tent we see the inauguration of the siege with religious rites, whilst in another, goes forward the work of the commissariat department. One woman before he kneading-trough is making loaves for the troops, which a second bakes in a round field-oven, whilst a third piles them up in a field overtopping their heads. The beleaguering army is depicted with great spirit, both in the moment of its being led forth in bounding chariots to the assault, and as it returns in triumph to its royal pavillion, in which, as the center of the whole representation, we seem to hear Shalmaneser from his throne, anticipating Caesar's boast, "I came, I saw, I conquered." Guarded by their conquerors, and introduced by court official, envoys of high rank who have fled to the city, and presented to the king their tribute of gold, silver, copper, changes of raiment, horses, while a long file of wretched captives brings up the rear. To the extreme left is seen Karkar in flames, alike as a work of high art such as could hardly have been looked for from Assyria in the ninth century before the Christian era, and for its interesting association with the history of Biblical personages, it will be owned on all hands to be a most striking tableau.

## BOOK REVIEWS.

*Tanagra Figurines.* Houghton, Osgood & Co., Boston, 1879. Certain excavations in Northern Greece have within a few years brought to light some curious specimens of ancient art. Among these are certain painted images or statuettes, which are here called Tanagra Figurines; Tanagra was an ancient Hellenic city in Bœotia. In opposition to the common usage of the Greeks, the Bœotians were Tomb Builders. The Figurines were taken from sepulchres, and are among the most ancient works of art. The book contains a number of photographs which give a view of their artistic finish, and of their beauty, which is very gratifying. The author has also written a very readable description of the archæological discovery, and furnished much interesting information. The book is published in a neat and attractive style.

*The Native Races of the Pacific States*, by Hubert H. Bancroft, Vol. 1. *Wild Tribes*, New York: D. Appleton & Co., 1875. Although this work has been published four years, we are happy to call attention to it again. It is a standard work, and fortunately was prepared just at the right time. The native races of the Pacific coast are fast losing their original peculiarities, and the material which would give information about them must soon perish. The ethnologists of this district should save the facts which are needed. It is remarkable that one man should be raised up to accomplish this task. It took the combined labors of the Jesuit and Protestant missionaries, the early historians and geographers, and many travellers in their day to record the character and peculiarities of the native tribes of the Atlantic coast, and the work is still unfinished. These tribes have disappeared and are now known only by the slow process of archæological investigation, or by the study of their tongues, which may be regarded now almost as dead languages, or by the study of a vast multitude of books. This work, however, gives to us a cyclopedia of facts about the races of the Pacific coast, which is very valuable. Mr. Bancroft has had unusual advantages for gathering information, having accumulated a fortune upon the Pacific coast, and at a very opportune time purchasing a large library of books which are now difficult to get, and at the same time being familiar with the ethnographical features of the country which he is describing. The wild tribes of the Pacific coast are divided as follows: 1. Hyperboreans, including the Esquimaux, Aleuts, Thlinkeets, and Tinneh Indians. 2. Columbians, including Nootkas, Chinooks, Sahaptins, Salish, and other tribes. 3. Californians, including Klamaths, Modocs, Shastas, Eurocs, Cahrocs, Hoopahs, Shoshones, Washoes, the Pelutamas, and many other tribes. 4. New Mexicans, including

Apaches, Comanches, Yumas, Navajoes, Mojaves, Moquis, Pimas, and many others. 5. The wild tribes of Mexico, including the Aztecs, the Miztecs, the Huaztecs, the Mazatecs, the Chiuantics, the Chiapanecs, the Pimas, etc. 6. Wild tribes of Central America, including the Mosquitoes of Honduras, the Maya-Quiché, and the inhabitants of Yucatan, Nicaragua, San Salvador and Honduras.

This division of the tribes is largely geographical. As to the origin or affinities of these races there might be a diversity of opinion, and further study may be necessary, but we have no doubt that the outlines are generally correct. The location of the Pacific tribes at the opening of history may be understood from this book, but the migrations are still to be studied. There is no doubt that these migrations followed the geographical features. The long valleys which extend the whole distance of the Pacific coast, and between the different ranges of mountains, and the various rivers which flow either into the Pacific or Gulf of Mexico, some of them extending for thousands of miles and traversing two zones in their course over the natural channels through which the successive races would flow. This is on the supposition that this continent was peopled from the Asiatic coast, and by the way of the Behring Straits. The cross-fertilizing of the races of this continent is more difficult to trace. Whatever evidence there is of a migration from the Pacific, by way of Polynesia, has not yet been thoroughly discovered.

*Geology of Wisconsin, Survey of 1873-77. Vol. II. Published under the Direction of the Chief Geologist, 1878.* This volume contains the annual reports for 1873-74, by I. A. Lapham, for 1875 by O. W. Wight, the geology of Eastern Wisconsin by T. C. Chamberlain, the geology of Central Wisconsin by Roland D. Irving, and the geology of the Lead Region by Moses Strong. It is a superb work. The mechanical execution of the book is a delight in itself, and the contents correspond. Prof. Chamberlain has done a grand good work, both for Wisconsin and the scientific world. His analysis of the quarternary formations of Eastern Wisconsin is delightful. These confused and heterogenous heaps of drift are not easy to understand. If anything is accidental in geology, we should say these were, but the Professor has brought order out of the confusion, and shown a wonderful system to them. These hills and valleys which so border the great lake and divide the streams of this territory only show more clearly what great forces were at work during the ice age. These streams now flow from the opposite sides of the narrow moraines, but in their ultimate course reach the widely separated destinations in the Gulfs of Mexico and St. Lawrence. The evidence is, however, brought out that these

kettle moraines are only the work of the great glacier which rested upon the whole northern half of this continent, and that once the drainage of this whole region was in only one direction, and that to the southward. As there are valleys in Ohio which connect the head-waters of streams which now run in opposite directions, showing where the great glacier was drained, so here these kettle moraines are traversed by channels which also present the same phenomenon. These moraines are supposed to belong to the formation preceding the terrace or champlain epoch, and yet the two formations, like different stages of the same great era, are evidently connected. No one can properly understand the physical formation of this continent without a study of them. They extend from the Atlantic coast in the neighborhood of New Jersey across New York, Pennsylvania, Ohio, into Wisconsin and Minnesota, and generally form the watershed between the two great systems of rivers which flow in opposite directions throughout the Mississippi Valley. Prof. Upham is now exploring this formation in Minnesota. Doubtless when the study of these moraines is completed we shall understand more of the glacial period. Few traces of man have been found in them. However confident others may be, we are not ready to assume any more than can be proved in reference to his preglacial existence. If, however, we would understand the organic unity, and properly learn how the earth was formed for man's abode, we shall need to study its geologic history, especially as connected with this latest formation.

*Foot-Prints of the Vanished Races in the Mississippi Valley*, by A. J. Conant, A. M. St. Louis: Chauncy R. Barns, 1879. We do not know as the American mind will become aroused to the importance of studying the wonderful things contained on this continent, but it is probable that the appearance of a few more volumes upon local archæology will convince intelligent minds that there is something worth studying. The field occupied by this author is entirely new, and the facts brought out are, on this account, more valuable. Curiosity alone should induce people to read this book. This volume comes in the form of a thin quarto, an unusual form for the archæologist's collection, and would have been better if it could have been in the octavo form. We are glad to see the cuts, for they are a pretty good advertisement in themselves. We are convinced, however, that quite a number of so-called archæologists in this country collect relics but do not read books. We are glad to commend this work to the attention of such, for they possibly may learn something by reading it. We do not think that the scientific basis has been reached, but as the facts accumulate a system may grow, and so archæology gradually take its place

among the popular sciences. We are trying to do something in our humble way to advance this science, and we welcome any book on the subject, and especially a book which treats of the archæology of Missouri, a region which has been so little known heretofore.

**THE PALENQUE TABLET.** *In the United States National Museum, Washington, D. C., by Charles Rau, Published by the Smithsonian, 1879.* In the year 1842 Mr. Charles Russell, U. S. Consul at Taguma, State of Campeche, Mexico, presented to the National Institute the fragments of a tablet from the ruins of Palenque, which have attracted considerable attention both before their removal and since their arrival at Washington. A description of the tablet had already been given by the explorer Stephens, and the drawings of the artist Catherwood had made it somewhat familiar to American readers, but the description lacked completeness and accuracy and the tablet also was without explanation. This deficiency has, however, after so long a time been made good by the critical and careful description given by Dr. Rau, and by the accurate drawings and photographs contained in this volume. Not only is a complete history of the discovery of the tablet given but a careful analysis of the different parts is also presented. The tablet contains, among other things, the figure of a cross surmounted by a non-descript bird and that of the priest offering a child, probably as a sacrifice; also, the different hieroglyphic characters are here drawn in separate engravings, and described by the author. It is also followed by a discussion of the origin of the cross, and the general character of Mexican hieroglyphics. The author takes the position held by Inman, in opposition to that held by Dr. Brinton, that it was originally a Phallic symbol, and neither of historic nor Christian origin. The author also gives descriptions of the hieroglyphic characters of the Mexicans, and the manuscripts in which they are found, but does not undertake to decipher them, and, in fact, indicates that all attempts have thus far proved failures. The book is creditable to the scholarship and critical skill of the author, and is an admirable publication.

*The Sunrise Kingdom; or, Life and Scenes in Japan, and Women's Work for Women There.* By Mrs. Julia D. Carruthers. Presbyterian Board of Publication. 1879. The Sunrise Kingdom of this book has a double significance. The geographical locality of Japan may have given rise to the name, but if the dawn of a higher civilization should arise upon the Asiatic continent, it seems now probable that the first land which should witness the change will be these very islands. The "Flowery Kingdom" has indeed had longer contact with the civilized



world, but the rapid advancement of Japan, and the greater receptivity of its people indicate that our Western civilization is to be rapidly introduced into this, the nearest of the Eastern lands. The spread of Christianity is certainly to produce great changes—perhaps no greater change in Asiatic society than the elevation of woman. A book which calls attention to this subject must be welcome. Mrs. Carruthers has written altogether from a missionary standpoint, without even touching on the ethnological or philosophical questions which might arise, but as a work illustrating the point referred to in the title is worthy of perusal.

*Report on the Chaco Cranium. Miscellaneous Ethnographic Observations on Indians Inhabiting Nevada, California, and Arizona, by W. J. Hoffman, M. D.* It has been assumed by some that the Cliff-Dwellers of Arizona were the ancestors of the Mound Builders. If there is anything in craniology, we should say, from the evidences given in this pamphlet, that this hypothesis was far from being true. There is more resemblance between the Chaco cranium and the Calaveras skull than between these and any Mound Builder's cranium which we have ever seen. We do not rely, at the present state of the science, very much upon craniology, for the differentiation is so slight that it is often almost impossible to discover it, but if Dr. Hoffman, with his advantages, will follow up this line of research, he will confer a great favor upon science. His ethnographic observations are also valuable, embracing the following points: the dress, food, fire, weapons, incantations, burials, signals, pottery, and pictographs of the Indians of Nevada, California, and Arizona. It is very unfortunate at this stage of ethnological investigation that Dr. Hayden's survey has been abolished. This pamphlet is a part of his last report.

*The Mound Builders. Being an Account of a Remarkable People that Once Inhabited the Valleys of the Ohio and Mississippi, together with an Investigation into the Archaeology of Butler County, O., by J. P. McLean. Cincinnati: Robt. Clarke & Co., 1877.* This little volume is a valuable accession to the literature which is rapidly increasing upon the interesting subject of the Mound Builders. The book is confined mainly to the works found in Ohio, and, as such, is more valuable than if it covered a wider ground. It gives the latest discoveries on this subject, as well as the latest points of dispute, namely, the tablets, but we think has given too much credit to the genuineness of the grave creek-stone. The archæology of Butler County comprises about one-third of the volume. The cuts are numerous and valuable, and the publishers are worthy

of praise in undertaking a pioneer work upon the prehistoric, as they are for having published already a series upon the early historic, period in Ohio.

*Sixteen Saviors or One. The Gospels not Brahmanic. By John T. Perry. Cincinnati: Peter G. Thompson, 1879.* This book is the result of a recent spicy newspaper controversy over a very profound subject. Mr. Kersey Graves, of Richmond, Indiana, published a volume with the surprising title, "The Sixteen Crucified Saviors," and prefixed to the work an address to the clergy, in which he informs them that "the divine claims of your religion are gone, all swept away by the logic of history and nullified by the demonstrations of science." This introduction of Mr. Graves we should think was sufficient to stamp his book without any answer. But Mr. Perry has taken the pains to answer it, and hence we have another book on the same subject. The Sixteen Saviors are (we give the spelling as they are found in the book) Chrishna, of India, 1200 B. C.; The Hindoo Sakia, 600 B. C.; Thammuz, of Syria, 1160 B. C.; Wittoba, of the Telengonese, 552 B. C.; Jao, of Nepaul, 922 B. C.; Hesus, of the Celtic Druids, 834 B. C.; Quexalcote, of Mexico, 587 B. C.; Quirinus, of Rome, 506 B. C.; (Æschylus) Prometheus, crucified 547 B. C.; Indra, of Thibet, 735 B. C.; Alcestos (we suppose Alcestis is meant) of Euripides, 600 B. C.; Atys, of Phrygia, 1170 B. C.; Crite, of Chaldea, 200 B. C.; Bali, of Orissa, 725 B. C.; Mithra, of Persia, 600 B. C. This list we also think is sufficient, and especially the spelling. If anyone is taken in by such a charlatan as Mr. Graves, we should say let them be deceived. This idea of a Savior was familiar to many Eastern nations, but it was not embodied either in the history or the later conception of over a quarter of these characters. We are not satisfied with the answer, though it is probable that the appearance of other books of a more learned character, one of which is noticed in this number, will call out and be worthy of more thorough and dignified treatment of the subject. A great controversy is now arising over the historical faiths. Dogmatism is not likely to have much force. The historical study of Christianity is its strongest defense, but it will require profound scholarship and a candid spirit.

*Proceedings of the Rhode Island Historical Society, 1878. A Lecture, by Chas. L. Bryant, A. M., St. Paul Academy of Science, 1879.*

*Report of Peabody Museum, 1879: Aboriginal Soap-stone Quarries in the District of Columbia, by Elmer R. Reynolds; On the Discovery of a Stone Pueblo in New Mexico, by Hon. Lewis Morgan; The Method of Manufacturing Pottery and Baskets, by Paul Schumacker.*

## NEW BOOKS.

IN the 15th Bulletin of the United States National Museum, Smithsonian Institution, Ludwig Kumlien has presented a very attractive ethnologic sketch of the Eastern Eskimos. He was the naturalist of the preliminary polar expedition, which, under the orders of Capt. Howgate, left New London Aug. 3, 1877, for the purpose of collecting material, skins, skin clothing, dogs, sledges, and Eskimos for the use of a future colony on the shores of Lady Franklin Bay. The descriptive part of the volume contains all the Eskimo names of mammals, birds, fishes, etc., that could be obtained.

Dawson, George M., D. S. *Sketches of the Past and Present Condition of the Indians of Canada*. 8°, 31 pages. (Appeared in Canadian Naturalist, Vol. IX.) The contents of this pamphlet attest a long and profound acquaintance of the author with the British Indians.

*Hippolyte de Charencey*: Le fils de la Vierge. Havre, 1879. 28 pages, 8vo. In this article the learned author discusses a large number of Asiatic and American deities, heroes, and demi-gods, to whom the popular mind had ascribed, from the most ancient epochs down to our period, a birth from pure virgins, without the intervention of a human father.

*Hippolyte de Charencey*: Déchiffrement des écritures calculiformes on mayas. Le bas-relief de la croix de Palenque et le manuscrit Troano. Alençon, 1879. 32 pages in 8vo. This article contains a short aperçu of all the attempts, hitherto almost fruitless, to decipher the manuscripts and inscribed tablets left to us by the Maya people of Yucatan. The author himself has in many previous publications shown his zeal in promoting the researches upon this subject.

The Munich Society for Promoting the Sciences of Anthropology, Ethnology and Prehistoric Archæology has just published its second volume, whose title is as follows: *Beiträge zur Anthropologie und Urgeschichte Bayerns*. München, 1879, Profusely illustrated. 266 pages, small 4to. This splendid publication was issued in four numbers, which are especially rich in researches upon the prehistoric status of Bavaria, a country which equals Pennsylvania in size, and is now being explored by some of the most learned and zealous archæologists which Germany possesses. The editors are Prof. T. Ranke and Nic. Rüdiger. We find instructive articles on: artificial caves in Upper Bavaria; on skulls of the Upper Bavarian race; on prehistoric modes of inhumation in Bavaria; on natural caves of the same country; on convolutions in the brains of twins; on the progress of the German element in Tyrol.



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*Issued Quarterly.*



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## TABLE OF CONTENTS.

INFLUENCE OF THE ABORIGINAL TRIBES UPON THE ARYAN SPEECH OF INDIA—  
By Prof. John Avery.

THE LATEST CUNEIFORM DISCOVERY. By Prof. A. H. Sayce, D. D., F. R. S.

THE ASSYRO-BABYLONIAN DOCTRINE OF IMMORTALITY. By Rev. O. D. Miller.

OSIRIDS OF ANCIENT EGYPT. By Prof. T. O. Paine.

HUMAN SACRIFICES IN ANCIENT TIMES. By Senor Oroscio y Berra.

TEUTONIC MYTHOLOGY. By Prof. R. B. Anderson.

THE ANTIQUITY OF SACRED WRITINGS IN THE VALLEY OF THE EUPHRATES.  
By Rev. O. D. Miller.

A CINERARY URN. By Rev. Selah Merrill, D. D.

MOUNT TABOR. By Rev. S. D. Phelps, D. D.

EDITORIAL NOTES.

MISCELLANEOUS. The Transfiguration.—The Beauty of the Dead Sea.—The Holy Land.—Recent Explorations in Greece.—Cleopatra's Needles.—A Buried Temple and Palace.—Synopsis of Articles in Magazines.

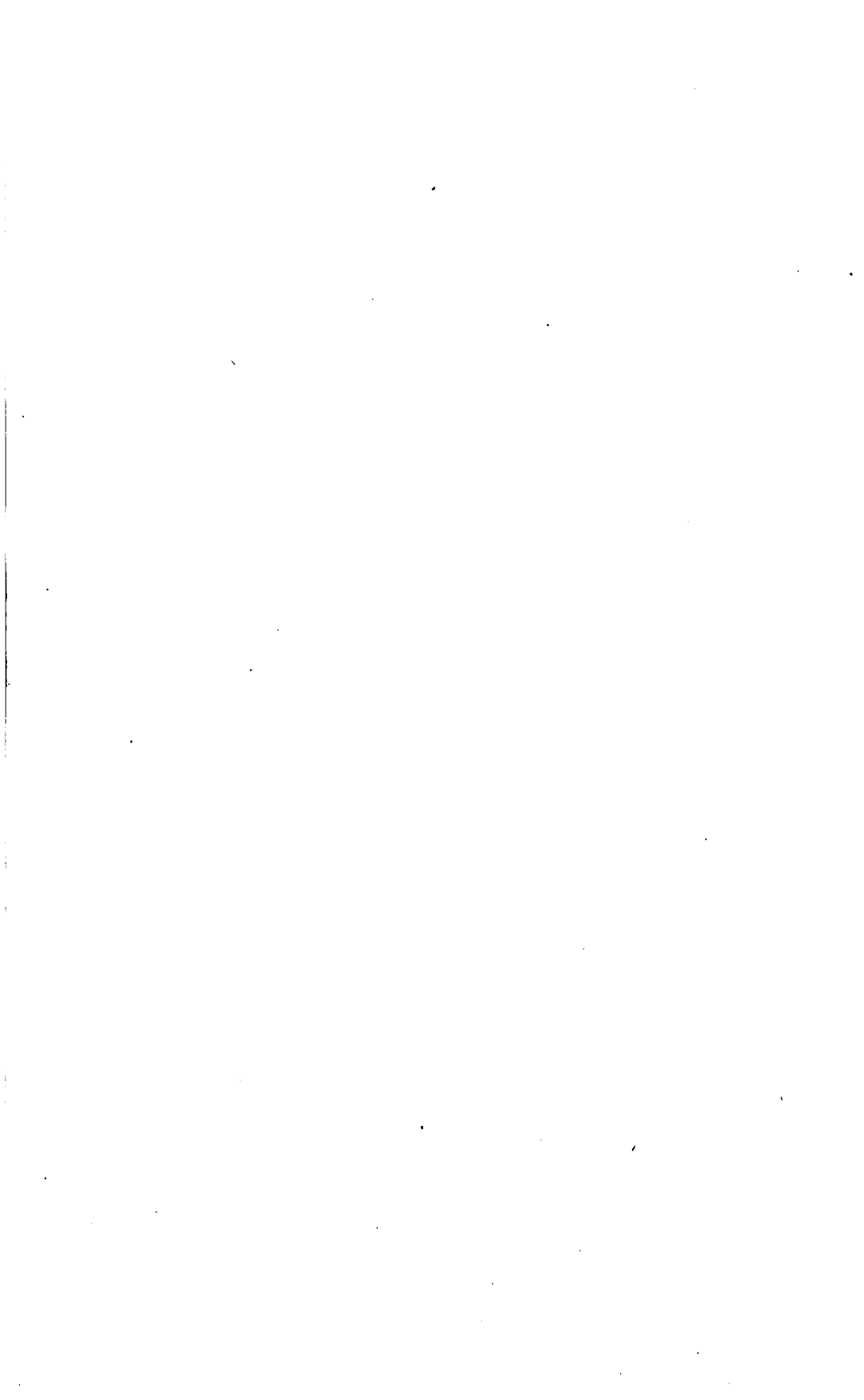
ARCHÆOLOGY AND ETHNOLOGY. How the Pyramids were Built.—Discoveries at Olympia.—The Venus of Vienne.—The Relics at Præneste.—The History of Money.—Collections of Coins in this Country.—Folk-Lore.—Mythology.

ART AND ARCHITECTURE.

GEOGRAPHICAL EXPLORATIONS.

PROCEEDINGS OF SOCIETIES.

INDEX OF ARTICLES ON ARCHÆOLOGY, ANTHROPOLOGY AND ETHNOLOGY.







THE TRANSFIGURATION.

# THE ORIENTAL JOURNAL.

APRIL, 1880.

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## INFLUENCE OF THE ABORIGINAL TRIBES UPON THE ARYAN SPEECH OF INDIA.

BY PROF. JOHN AVERY.

Read before the Oriental Society.

Students of ethnology are aware that the teeming millions who people the vast domain of British India are not homogeneous, but represent several distinct branches of the human family. Subtracting the present European rulers of India—a mere handful, and the descendants of the Mohammedan conquerors, whose occupation of the country is comparatively modern, and also the scattered representatives of neighboring peoples, who have found their way across the border, there still remains the great bulk of the population, whose ancestors have possessed the land from a remote and uncertain antiquity. Taking language as our guide, this population is readily cleft into two or three grand divisions; one called Aryan, occupying Northern India, and allied to the ruling nations of the Western world; another called Dravidian, peopling Southern India and Northern Ceylon, and of more doubtful ethnic affinities, but thought, with considerable probability, to be an outlying member of the imperfectly defined Scythian family. Besides the Aryans and the cultivated Dravidians, there are numerous tribes, generally belonging to the lower strata of society, who have maintained their independence in the rugged fastnesses of Central India, or are found in small numbers here and there among the hills in other parts of the land. Though some of these tribes are doubtless of the same stock as the Dravidians, being less civilized because less favored with opportunities for culture, the race connections of others are still uncertain.

Relative location and political relations, with such scanty facts as history furnishes, lead us to conjecture that these different elements of the population represent successive immigrations.

Each body of immigrants, excepting the last, was once spread over a larger territory than at present, but was overcome in turn and partly displaced by more powerful invaders.

The history of other nations forbids us to suppose that these peoples, though differing in race, could live side by side for centuries in the same country, subject to the influence of a common soil and climate, not only without becoming assimilated in form and color, but without influencing each other's institutions—among them language.

That the strongest influence has always proceeded from the Aryans is admitted on all hands. Highly endowed by nature they were the first to organize themselves into States. Their literature, dating back to the time when they first set foot upon Indian soil, developed into enormous proportions, and became the norm for literary excellence throughout India. Their ancient language, though betraying unmistakable signs of youth, was far more highly organized and a fitter instrument of vigorous intellectual capacity than were the languages of the other races many centuries later. But, conceding that the Aryans were able to impart so much to the other tribes, evidence is not wanting that they felt a decided influence in return.

It is the design of this paper to discuss one phase of this influence, to inquire whether the stream of Aryan speech has been perceptibly colored by tributaries from the aboriginal tongues. We use the term aboriginal in its accepted sense, as including the civilized Dravidians and the savage hill tribes, though it is not quite certain to whom the designation strictly belongs. Perhaps the negative name, non-Aryan, best represents our present knowledge of the subject.

Before prosecuting our main inquiry it will be useful to anticipate the possible objection that a people so superior in intellect and culture, and so jealous of the purity of their speech, as were the Aryans, would have no need, or would disdain to add to their linguistic stock from the languages of their ruder neighbors, by briefly sketching the course of development of Aryan speech as we conceive it to have been. We expect to show that the dignified and unchanging Sanskrit of the classic period, which is most often present to our minds as *the* language of India, is not a fair type of the flexible and ever-changing speech of the great mass of the Aryan population.

The language of the Indo-Aryans at the time when they separated from their Turanian kindred presents a picture of vigorous and untrammelled life. Though having the general features of the later Sanskrit, its wanton growth had not yet passed under the knife of the schoolmen. Its noticeable features are a disregard of euphonic laws, an exuberance of inflections, but without

a rigid system in the use of these, and a general air of freshness, unpremeditation, and instability. The idiom of the Vedas, then, has the essential characteristics of a popular speech. Yet it cannot be denied that the character and narrow range of the subjects treated were not perfectly adapted to display the entire linguistic resources of the Aryan people, and we may possibly thus early detect the germs of the later literary dialect.

It will be readily conceded that a language at such an immature stage would be sensitive to any strong influence, whether from within its own boundaries or from outside. The want of general education, which in modern times serves to unify speech; the lack of authority made venerable by age; and the absence of that conservative and critical spirit, which is born of culture—all would tend to make the Aryans less reluctant to engraft upon their own language anything from foreign sources, which would help them better to communicate with the people, and to name the strange objects in their new-found home. This liberal tendency, which contrasts so strongly with what we later observe, is evinced by the probable reception of a portion of the aborigines into the Aryan State, thus creating the necessity of more intimate contact between the races.

When we descend to the next stage of the language across a long interval in which the successive steps of development have been obliterated, we find in the Brâhmanas a great change. The language, retaining here and there the freedom of the Vedic tongue, is more conformed to rule; shows more the studied forms of the schools than the illogical speech of the peasant. At the same time the Brahmins have consolidated their power, and widened the breach between themselves and the common people. For this reason we believe that at this time popular dialects existed, which, though partaking of the general progress of Aryan speech, preserved from the Vedic idiom many roots and forms which were dropped by the cultivated dialect. Though this may not be capable of direct proof, we have not far to look for a genuine example. As early as six hundred years before Christ, if the generally received date of his death is correct, we find Buddha preaching in a popular dialect, known to us as the Pâli. The rock inscriptions of Asoka and the speech of the inferior characters in the drama exhibit dialects still more divergent from the Sanskrit. From the second century of our era, for a space of ten centuries, the popular languages disappear, not because they were merged in the Sanskrit but because they were not the medium of literary production—at least no specimens have survived. About 1200 A. D., the celebrated epic of Chand was produced, from which may be dated the cultivation of the modern vernaculars, which show, in various respects, a wide departure from the parent tongue.

If we have correctly sketched the vicissitudes of the Aryan speech, we draw the following inferences: 1st. As far back as the Brâhmaṇic period, and perhaps in the age of the Vedic bards, there existed popular dialects by the side of the literary Sanskrit. 2d, these dialects, being esteemed vulgar by the priesthood, were not so jealously guarded from profane lips as the sacred Sanskrit, and therefore were more liable to corruption of forms, and the addition of foreign materials at the hands of the new members of the State, who were constrained to adopt the language of their conquerers. Moreover, the numerical superiority of the aborigines would go far to balance the better culture of the Aryans.

Having now pointed out the possibility of non-Aryan influence upon Aryan speech, we proceed to inquire what traces actually exist of such an influence. Fortunately we are not so much in the dark as a few years since, in regard to the modern languages of India. Though Dr. Caldwell's *Comparative Grammar of the Dravidian languages*, a work too well known to need commendation, was first published some twenty years ago, and five years since appeared in a new, revised and enlarged edition, no one has been found, until recently, to undertake the same task for the Aryan languages. This work has now been done by Mr. John Beames, who, between the years 1872 and 1879, has published in three volumes a *Comparative Grammar of the Modern Aryan Languages of India*. With the help of these two grammars the comparison of the aboriginal with the Aryan tongues is greatly facilitated. Still, very much remains to be done to complete our knowledge of the obscure dialects of the forest tribes.

From what has been said our search is likely to be most fruitful in the popular speech, though traces of the aborigines may be found in the literary language for reasons to be suggested hereafter.

When a language has been subjected to foreign influence sufficiently strong to impair its integrity, it will probably be affected in one or more of three ways: 1st. In its sounds, by the introduction of new ones or the modification of those already existing; 2nd. In the structure of its words, including the formation of bases and the modes of expressing relation; or, 3rd, In its vocabulary, by the addition of new materials, either roots or complete words. We might add a fourth particular: the collocation of words in a sentence, but we do not propose to consider this point.

1. Sounds. The vowel system of the Vedic dialect, which the classical Sanskrit inherited unchanged, suffered some modification in the popular speech. The *l* and *r* vowels disappeared

in the Pāli, and the diphthongs *ai* and *au* suffered contraction to *e* and *o*. The latter sounds also, which are always long in Sanskrit, are treated in Pāli as either long or short. They are long before a single consonant, and short before a group of consonants, agreeably to a law which does not permit a long vowel to stand before several consonants. These vowels also not infrequently pass into short *i* and *u*. In other words, the written Pāli recognizes a changed pronunciation which must have become habitual in the spoken language.

Descending to the scenic Prākritis we find the same omissions and modifications in sounds; *e* and *o* being common in quantity can stand before one or several consonants. At the same time the unoriginal character of this pronunciation appears from the use of the same character in Pāli and in the dramatic dialects to represent the two sounds. When we come to the modern vernaculars we are surprised to find a return to ancient usages, in regard to these vowels, in theory at least, though the old pronunciation has been corrupted by the common people in some of the dialects. This may be explained as the result of a tendency, produced by education, to restore the Sanskrit to its ancient authority as the rule of correct speech.

Where, now, are we to look for the cause of these vowel-changes? If we examine the vowel-system of the Dravidian nations we shall find that it possesses the long and short sounds of *e* and *o*. That the distinction is a primitive one is rendered probable by the way in which they are used, and by the employment of a separate character to represent each in most of the dialects of this group. Since we have good reason to think that the Dravidians, or some tribes of kindred race and speech, were the people whom the Aryans found in northern India, we infer that it was by familiar intercourse with them that the latter came to modify their vowel sounds. Another case of non-Aryan interference is the tendency in some of the vernaculars to change short or long *a* to *ê*. Mr. Beames says that in colloquial Bengali *â* is almost universally corrupted into *e*, which "is pronounced more like the English *a* in *mat*, *rat*, etc., than like the full Italian *e* in *veno*, *avete*, etc., and seems to be a lineal descendant of the short *e* of Prākrit." We may compare with this the tendency of the Dravidian tongues to change the *a* of Sanskrit words into *ê* or *ë*—e, g. *Gangâ* becomes in Canarese *Gange*, and *âsâ* is turned into *âsei* in Tamil. We know that the aborigines long made a stand in Bengal, and would be likely to make a more permanent impression upon the language of their conquerors there than in the provinces subdued earlier. The loss of the diphthongs *ai* and *au* in the ancient and modern descendants of the Sanskrit, excepting in words recently imported from

the parent source, may probably be laid at the door of the aborigines. These sounds are not indigenous to the Dravidian group, *ai* being represented by *ēi*, and *au* occurring only in Sanskrit derivatives.

A foreign influence more ancient and more permanent than that upon the vowels is found in the so-called cerebral consonants. These are the consonants of the third *varga*, *t*, *th*, *d*, *dh*, *n* and the peculiar Vedic *ḷ*. To these might be added the letters *r*, *r* (*r*), and *śh*, which are treated as cerebrals by the Hindu grammarians, but as they are not confined to the Indian branch of the Indo-European family their origin does not concern us here.

So far as we are aware three theories have been advanced to account for the presence of the cerebral letters in the Aryan languages of India. First, it is urged that they really form a part of the vocal stock of the whole Indo-European family, though known under the name of dentals. When one branch of the family found a home in India it brought these sounds with it. In process of time the enervating climate produced a relaxation of the vocal organs, and the tongue in forming this class of letters was inclined to touch the edges of the teeth instead of making a contact high up in the palate as before, thus producing the soft Indian dentals. However, when these letters were contiguous to *r*, *r* (*r*), or *śh* the old pronunciation was appropriately retained, as requiring less change in the position of the tongue than the true dentals. When *r*, etc., dropped out the cerebral letters often remained.

Such in substance is the theory of Mr. Beames. A second theory, advocated by Dr. Bühler, denies that the cerebral letters were a primitive possession of the Indo-European family, but holds that they were invented by the Indo-Aryans themselves after their settlement in India. From the Vedic dialect they were transmitted to its mediæval and modern descendants, becoming constantly more and more popular with the people. A third theory, which is confidently urged by Dr. Caldwell, is that the Aryans acquired these sounds from the aboriginal tribes, in whose languages they greatly abound, and appear to be an original possession.

## THE LATEST CUNEIFORM DISCOVERY.

BY REV. A. H. SAYCE, D. D., F. R. S., QUEEN'S COLLEGE, OXFORD, ENG.

Two very important documents have passed into the possession of the British Museum during the last few months. One of these is a cylinder of clay inscribed with a proclamation of Cyrus, in which he describes his conquest of Babylonia. It casts a new and startling light upon the history of the time. Cyrus describes his occupation of Babylonia as almost bloodless; the people, and more especially the priests not only welcomed him, but had secretly intrigued with him during the reign of Nabonidus, the last king of Babylonia. The cause of this strange conduct is stated to have been the sacrilegious behaviour of Nabonidus; his neglect of the worship of the gods, and contempt of the priests. This, however, is not the only novelty that we learn from the cylinder. Cyrus further appears in it as a devoted worshipper of the Babylonian deities. He not only adopts the style of the native monarchs, but places himself and his son Cambyzes under the protection of the Chaldean gods, above all under that of Bel Merodach, the patron divinity of Babylon. He boasts of his restoration of the Babylonian temples, and of the other ways in which he practically carried out his proposed adherence to the faith of his subjects. In fact, he comes before us in this cylinder as a politic prince, anxious to conciliate those he had conquered; very different indeed from the stern monotheist hitherto pictured by commentators on Isaiah.

This cylinder has been supplemented by a still more important document recently acquired by the Museum. This is a tablet of considerable size, unfortunately half broken, which describes, year by year, the history of the reign of Nabonidus, the conquest of the Medes and Babylonians by Cyrus, and the first year of the rule of Cyrus over Babylonia. The representations of the cylinder are fully borne out by the official record, which enters into particulars naturally not described upon the cylinder. Owing to the mutilation of the tablet, the annals of the first, second, third, sixth, eleventh and seventeenth years of Nabonidus are in a fragmentary state, those only of his seventh, eighth, ninth and tenth years being complete. The following are the most important facts that can be gathered from the fragments:

In the second year of Nabonidus there was a rising at Hamath, in Syria, and in the next year the king cut down timber on Mount Amanus, and visited Phœnicia, probably in connection



with the revolt. The Persians first appear upon the scene in the sixth year of the Babylonian monarch, when we find Cyrus, who is described as king of Ansan, or Southern Elam, engaged in fighting against Istungu, the classical Astyages, king of Ayamtanu or Ekbatana. The army of Astyages, however, revolted against him, and sent him in chains to Cyrus. This would have taken place B. C. 549. Meanwhile Nabonidus, instead of coming to the help of the Medians, remained inactive in the town of Tera, which was probably a suburb of Babylon, contenting himself with stationing his army, under the command of his eldest son, in Accad, or Northern Babylonia, so as to check the advance of Cyrus in that direction. The king's mother called Nitokris by Herodotus, was also in the camp, which was stationed on the Euphrates, near Sippara or Sepharvaim, and here she died on the 5th of Nisan or March, in the 9th year of Nabonidus (B. C. 546), and was mourned for three days by the king's son, the nobles, the army, and the people of Accad, though not, it would seem, by the king himself. About the same time Cyrus completed his conquest of the Medes by crossing the Tigris near Arbela, in order to proceed against the last cities in that part of the former empire of Media, which still held out against him. He then attempted to enter Babylonia from the north, but the Babylonian army was apparently too strong for him, and it was not till the 17th year of Nabonidus (B. C. 538), that the conquest of Babylonia was effected. Cyrus had first tampered with the subjects of the Chaldean king, and, when everything was ready, marched against Nabonidus from the south-east, where the Babylonians who lived on the coasts of the Persian Gulf had already revolted in favor of the invader. Nabonidus now endeavored to propitiate the neglected gods, but to no purpose. A battle was fought in the month Tammuz, or June, at Rubum, in the south of Babylonia, resulting in the defeat of Nabonidus, and the revolt of the people of Accad from him. Sippara was taken by the Persians, without fighting, on the 14th of Tammuz. Nabonidus fled, but was captured by the Persian General Gobryas, on the 16th of Tammuz, and Babylon was entered without any resistance and without a siege, by Gobryas, almost immediately afterwards. The only resistance experienced was at the end of month, when some "rebels of the land of Gutuim" or Kurdistan shut themselves up in the temple of Belus, at Babylon; but as they had no weapons they could do nothing. It was not until the third of Marchesvan, or October, that Cyrus entered Babylon, apparently during the night, "the roads being dark before him," and appointed Gobryas and other officers to govern the city. On the 11th of the same month Nabonidus died,

which disposes of the story of his appointment to the government of Caramania. Cyrus allowed the people of Accad to mourn for him six days.

Cyrus now commenced his policy of conciliation. The Babylonian gods were restored to their shrines with every mark of reverence, and on the fourth of Nisan, the first month of the new year (B. C. 537), Cambyzes, the son of Cyrus, took part in the religious ceremonies performed in honor of the various deities. As this is the last event recorded, the tablet must have been drawn up soon afterwards, and deposited in the public library, where it could be read by any one who chose. We know from other sources that education was very widely diffused at this time among the people.

It is not necessary to refer to the important bearing these two documents have upon Biblical and profane history, and more especially upon the book of Daniel. One more argument has been added to the case against Xenophon's *Cyropædia*, which competent judges have long pronounced to be a romance, and the siege of Babylon, described by Herodotus, turns out never to have taken place. It is possible, however, that Herodotus has confounded Babylon with Sippara, where the relics of the army of Nabonidus took refuge.

EXCAVATIONS have recently been carried on by Capt. Durand, in the island of Bahrein, in the Persian Gulf, resulting in the discovery of several early tombs and a cuneiform inscription. The island was called Dilvun by the Babylonians and Assyrians, and seems to have been considered a place of special sanctity, since it was termed "the island of the gods" by the Accadians of primitive Chaldea. Hence, probably, its use as a burial ground. The inscription consists of four lines of Babylonian cuneiform, engraved on a large phallus of black basalt, and reads "The palace of Rimum, the worshipper of the god Khirzak, the governor." By the side of the inscription a conventional representation of the sacred tree has been carved.

# THE ASSYRO-BABYLONIAN DOCTRINE OF THE FUTURE LIFE:—FOLLOWING THE CUNEIFORM INSCRIPTIONS.

BY REV. O. D. MILLER.

The subject here announced attaches to itself no small degree of interest, in whatever light we view it. For the Biblical scholar, especially, it assumes a peculiar importance, on account of the supposed influence exerted by the Babylonian culture and religion, upon the developement of the Hebrew people. But almost the only source of information respecting the Assyro-Babylonian belief, concerning the life of man after death, is that of the cuneiform texts; and about the only attempt, hitherto, to collect the evidences they afford, bearing upon this subject, was that by Mr. Fox Talbot, a few years since, the results of whose researches were published in the *Transactions of the Society of Biblical Archæology*, London.<sup>1</sup> These results are now widely known, and quite generally accredited by scholars in this country, as well as in Europe. That the Assyro-Babylonians entertained the notion of a future life, under some form, at least, was fully established by Mr. Talbot, and thus far his results are generally accepted by cuneiform scholars. But prior to Mr. Talbot's researches, M. F. Lenormant had made the statement, relative to the Assyrian doctrine of the future life, that: "There appears no trace, so far as we know, of a distinction of rewards and punishments."<sup>2</sup> Citing this language, Mr. Talbot devotes an entire paper with the view to controvert M. Lenormant's position.<sup>3</sup> But this paper is the least satisfactory of the series; and, in the interest of correct views upon a subject so important to Biblical scholars, it demands a careful review. It is proposed in this article to point out, as briefly as possible, the more important particulars in which Mr. Talbot has been obviously misled himself, and is thus liable to mislead others not familiar with cuneiform studies

In the paper referred to, Mr. Talbot's chief reliance in controverting M. Lenormant's views, is a passage in the legend of "Ishtar's Descent into Hades," which he translates as follows:

- 25 The Porter entered, and said to Nin-ki-gal,
- 26 These *curses* thy sister Ishtar (utters),
- 27 blaspheming thee with great *curses*' (....),
- 28 When Nin-ki-gal heard this (....)
- 29 She grew pale, like a flower that is cut off;
- 30 She trembled, like the stem of a reed:

<sup>1</sup> See vol. i, pp. 106-115; ii, pp. 29-79; and 346-352.

<sup>2</sup> *Prem. Civilizations*, ii, p. 83.

<sup>3</sup> *Transactions of the Society of Biblical Archæology*, ii, pp. 346-352.

- 31 'I will cure her rage,' she said, 'I will cure her fury;  
 32 These *curses* I will repay to her!  
 33 Light up, *consuming flames!* light up, *blazing straw!*  
 34 Let her doom be with the husbands who deserted their wives!  
 35 Let her doom be with the wives, who from their husbands'  
     side departed!  
 36 Let 'her doom be with the youths who led dishonored  
     lives' " !<sup>4</sup>

Assuming the foregoing to be a correct rendering of the Assyrian text, the evidence would be very conclusive in support of Mr. Talbot's views. But out of some half a dozen different versions of this Legend of Ishtar, by different Assyriologists, none of them presents any analogy to Mr. Talbot's, so far as regards the foregoing passage; and even his own previous version of it was wholly different, except that of the closing lines (34-36). It is only in respect to the two lines, 34-35, that Mr. Smith's version agrees in any sense with the foregoing. Thus, Mr. Talbot's rendering of his chief proof-text is almost wholly unsupported by the views of other Assyriologists. For the sake of comparison, we place below Mr. Smith's version of the same passage:—

- 25 "The keeper entered and called to Ninkigal;  
 26 'This *water* thy sister Ishtar . . .  
 27 . . . of the great vaults . . . .'  
 28 Ninkigal on hearing this  
 29 like the cutting off of . . .  
 30 like the bite of an insect it . . .  
 31 'Will her heart support it, will her spirit uphold it;  
 32 This *water* I with . . . . .  
 33 like *food eaten*, like *jugs of water* drank . . .  
 34 Let her mourn for the husbands who forsake their wives.  
 35 Let her mourn for the wives who from the bosom of their  
     husbands depart;  
 36 for the children who miscarry, let her mourn, who are not  
     born in their proper time.' " <sup>5</sup>

As will be seen, this version departs wholly from Mr. Talbot's, except of the two lines (34-35) already noticed. Where Mr. Talbot has "curses," Mr. Smith has "water;" and where the former has "consuming flames" and "blazing straw," the latter has "food eaten" and "jugs of water drank." The difference is, that while Mr. Smith has taken the Assyrian expressions at their *ordinary value*, Mr. Talbot has attached a sense to them which only rarely occurs in the texts. But even Mr. Smith's version of

<sup>4</sup> See Records of the Past. i, p. 144. Cf. Trs. So. Bib. Arch., ii, pp. 347-350.  
<sup>5</sup> Chaldean Account of Genesis, p. 230.

the two lines previously referred to, lends more or less support to Mr. Talbot's views, in opposition to M. Lenormant's. It is necessary, therefore, to enter into a more critical examination of lines 34-36.

In the phrase "let her mourn," or, "let her doom be," which occurs in each of the three lines, the Assyrian verb is *lupki*; and it is remarkable that both of the English translators, as well as M. Lenormant, in his versions, have taken this form for the *third person*, precative, instead of the *first person*, which, as M. Oppert has correctly stated, is the proper construction; the third person being *lip-ki*, instead of *lup-ki*.<sup>6</sup> Thus, it is not Nin-ki-gal who speaks, referring to Ishtar, but it is Ishtar herself, expressing her own grief, as will appear further as we proceed. The term for "husbands," in the thirty-fourth line is not the usual Assyrian expression in such cases, but *Illi*, "warriors," or "heroes." Again, where Mr. Smith has "forsake," the Assyrian is *E-zi-bu*, which means simply "to leave behind," without any necessary sense of culpable desertion. The import of the thirty-fourth line will be now apparent. Ishtar says: "Let me weep over the fallen heroes, who have left their wives behind;" that is, fallen in battle, leaving their wives to mourn their loss.

Passing to the thirty-fifth line, where the two English versions have "wives," the Assyrian has the monogram for "female slave," or "maid-servant," *Ardu*, *Ardatu*, followed by the plural sign, instead of *Khirtu*, the ordinary term for "wife;" and the Assyrian corresponding to "husbands," in the same line, means rather the "affianced," or "betrothed," than "husbands" properly speaking. Thus, Ishtar says: "Let me weep for the female slaves, who, their affianced," etc.; the end of the line being fractured.

Finally, as regards the thirty-sixth line, where the two English versions have *plural* nouns and pronouns, the Assyrian text has only the *singular*. Mr. Talbot has gone so far even as to alter his text, substituting a plural pronoun for a singular. The expression in the original is peculiar. The usual Acadian for male child is *tur-us*, and for a female *tur-rak*; but here we have *un-tur*, Assyrian *avil-maru* (?), "man-child." The allusion appears to be to the youthful Sun-god *Tur-zi*, "son of life," the beloved of Ishtar, who had suffered an untimely death, and whom to meet, as all Assyriologists agree, Ishtar had resolved to descend into the infernal regions, where he was detained by Nin-ki-gal, the queen of Hades. The text is wanting, again, at the end of the line, and all we can make out with tolerable clearness is: "For the youthful, only son, let me weep, who not his days" (has lived out, or who has been cut off before his

6. L'Immortalité de L'Ame, cher Chaldeens, p. 23, Note 3.

time). According to the text, then, properly interpreted, Ishtar offers no such insult to Nin-ki-gal, as Mr. Talbot's version implies. Even Nin-ki-gal is in trouble, and Ishtar wishes to acquaint her with her own grief, and it is Ishtar who speaks in the closing lines of the passage quoted. The views here put forth are substantially those entertained by MM. Lenormant and Oppert. Dr. Schrader's version, we have not been able to consult. There exists no doubt, then, that Mr. Talbot has wholly misconceived the sense of this passage, constituting his chief reliance in the support of his thesis, as opposed to M. Lenormant's views previously put forth.

But Mr. Talbot translates two other passages, of much less length, to which we give a brief attention. He remarks by way of preface, that "The Sun, who was 'the judge of men,' is called 'The destroyer of the wicked,' and what this future judgment would be, may be inferred from a passage in the third Michaux Stone (Col. 4, 11), where it is said 'the remover of this land-mark shall be accursed,' and 'the Sun, the great judge of heaven and earth shall condemn him, and shall thrust him into the fire.'"<sup>7</sup>

The translator then gives the text and his version of two lines of the document, as follows: "The Sun, great judge of heaven and earth, may he judge his judgment, and into the fire thrust him."<sup>8</sup> From another document of the same class, we have again this rendering: "The Sun, great judge of heaven and earth, may he judge his judgment, and into the fire may he thrust him."<sup>9</sup> Here, too, as it would seem, Mr. Talbot has misconceived the import of the Semetic original. M. Menant and Dr. Oppert have made a special study of all the contract tablets known, and have published a large volume upon the so-called "Documents juridiques" of Assyria and Chaldæa. An English version of the "Stones of Michaux" following their views, appears in the "Records of the Past," from which we extract their renderings of the two passages cited by Mr. Talbot: "May Shamas (the Sun), the bright judge of heaven and earth, judge his lawsuit, and have him seized in deed doing."<sup>10</sup> "May Shamas, the great judge of heaven and earth, judge his unpunished misdeeds, and surprise him in flagrant deeds."<sup>11</sup>

The foregoing is undoubtedly a correct rendering of the two passages. Such being the case, Mr. Talbot has wholly failed to sustain his thesis in opposition to M. Lenormant's views. The texts, in fact, afford numerous examples of the customary imprecations upon those, who should be guilty of displacing land-

7. *Trs. So. Bib. Arch.*, ii, p. 350.

8. *Ibid.*, p. 351. For the text see 3d Mich. Col. IV, l. 10, 11.

9. *Id. Cf. 1st Mich. Col. iii, l. 15, 16.*

10. *Records, etc.*, ix, p. 100.

11. *Ibid.*, p. 96.

marks, defacing inscriptions, or mutilating monuments; and, if the notion of future punishment had been a prevailing doctrine, such would be the occasions, before almost all others, when we should look for some allusion to such a belief. So far as we have observed, however, the inscriptions afford no instance of such allusion.

As we have before observed, Mr. Talbot's proofs of the simple fact of a life after death, as a cardinal doctrine of the Assyro-Babylonians, are quite satisfactory; and it would be natural to suppose that, the same as the Egyptians and other peoples of antiquity, the populations of the Euphrates and Tigris had conceived the idea of a distinction of rewards and punishments in the future life. Nor is it by any means certain that they did not. We can only say that Mr. Talbot's paper, devoted expressly to the proof of it, affords no evidence of the prevalence of such a belief.

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### OSIRIDS OF ANCIENT EGYPT.

BY PROF. T. O. PAINE, LL. D.

In the graves of the old Nile-dwellers are found, by hundreds, little images or statuettes, delicately sculptured out of stones of all kinds, white marble, white chalk, woods, or clay baked into earthen. They are two and a half to twelve inches long, and of two kinds. One sort represents a human being, closely wrapped in linen like a mummy. The other, a human being as he appears in the other world: he is alive and on his feet, dressed in the robes of the Makher, Pronounced True: his feet are bare as walking on holy ground, and his head is uncovered. In the Sacred Book of Olden Egypt the departed is pictured in the Panorama in both forms.

In this paper we will speak of these statuettes, as studied in the Museum of Fine Arts, Boston, for many weeks, scattered through several years.\* In particular we will describe a beautiful statuette, now lying before us, from Rev. D. H. Montgomery, of West Bridgewater, Mass., left for deciphering, translation, and explanation. We may as well begin just here a series of articles on *Revelations Made to the Prehistoric Nile-dweller*: for Rev. Dr. Selah Merrill has kindly shown me an important statuette owned in Andover (Mass.); and so our attention is specially directed to these so-called *Osirids*—and rightly so named.

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\*Translations of a great portion of the hieroglyphic texts of the Egyptian Room will be found in the Way Collection Cases, and on various monuments outside, made and placed by the writer. They are carefully pen-printed, and generally marked "P."

## THE WEST BRIDGEWATER OSIRID.

The statuette owned in West Bridgewater is four inches long; of baked clay; bright, sparkling, blue all over; of the first, or mummied form; the forearms crossed on the chest; the hands holding, each, a garden tool—hoe and pick; a bag of wheat represented on the back suspended from the shoulders; and a perfectly full inscription of six columns, in black, written before baking and baked in forever. This inscription covers the entire front and sides, from below the chin and both shoulders, to the feet. It is written in hieroglyphs.

## TRANSLATION OF INSCRIPTION.

"All things of the South are done by Amun Ra, the King of the gods, and the mothers. Behold, these little images should be regarded as those of Osiris——. They will do everything there in the Land of Divine Truth. Lo, evil things are beaten off there from anyone when they are about to befall him. Grant thou this:—Call ye me, whenever the meadow grows green there in the South: when the shore-dams are overflowed there: when the boats are paddled between the sandy banks from west to east, call ye me."

"Osirid" means *like Osiris*: an image or likeness of God. See farther on. Among all the Osirids of the Way Collection of Egyptian Antiquities (Mu. F. A.), there is no one fuller in text than this. But this text is very greatly condensed by violent contractions and omissions, so that it would have been impossible to make out and read it without a knowledge of the perfectly full inscriptions found on the very much larger statuettes, and in the Sacred Book of Olden Egypt, from which the inscription is copied—chap. vi.

Sometimes twenty duplicates are found in the museum. This one might have been repeated any number of times, for it was made as the text itself tells us, for "Osiris for anybody;" that is, for "Osiris——;" the name of the man or woman who has died being omitted, and the words "for anybody, ER NEB," being inserted. Osirids from six to ten inches long contain the name of the departed put into the blank, or, instead of "for anybody." These are special statuettes, made for the particular ones who have gone, alive, into Amenti, or into the Land of Divine Truth, or, into the Future World under some other exceedingly interesting and instructive appellation. Those, of course, are more costly than the one before us. If the name is omitted, the image can be made by the quantity—"for anybody"—and thus be sold for a smaller sum of money.

In the Way collection, great numbers have no names at all; but "Osiris" is joined immediately to the following text. I



never noticed before now, the words "for anybody" added as here. I have found a few with a space left blank; but when they were purchased so very long ago, the engraver or scribe did not fill up the blanks, and they remain blanks to this day.

Many Osirids in the Way have the man's name, or the woman's, and nothing more. Many have not one single hieroglyph. These last were very cheap, and of course, were made for very poor friends of the departed. Some are not more than about two inches long.

#### INTERPRETATION.

The text (hieroglyphic) informs us respecting this image, and its use; and the tools and bag tell their story. The garden-tools are to be used in cultivating the fields of the blessed. Not these pictures of tools; but they represent that the departed will be employed hereafter in doing something—in keeping and tilling the meadows of God. The bag of wheat is impressively instructive; the departed takes something from this life wherewith to begin the next. In the Sacred Book of the Prehistoric, and handed down by the Historic Nilemen (Chapter 110), the new-comer into the fields of Amenti is seen plowing, sowing, reaping, threshing; and two large baskets, one of unwinnowed and one of winnowed grain, are pictured, while further on, he is presenting meat offerings; that is, bread offerings unto God. On the back of one Osirid in the Way, are two water jars, suspended by cords from the two ends of a shoulder-yoke, to be used in watering the meadows of God, in the fields of Paradise.

*An Osirid* is an image of God under the name of Osiris—the favorite name of the one God throughout all ancient Egypt. It was the name dear to the people, for under it he lived on earth (or was so to live); and under it he fought with Set, the Devil, and was killed by him. But he at once departed into the land of the "Worthy," or "Pronounced True," and became the judge of the dead, or, of all after their life in this world.

Every man or woman at death, if worthy, took the form of God-man—Osiris—and under this form was safe from the crew of the Devil, who met him in the forms of beasts and serpents. By the omnipotent name of "I am the I am, Osiris," the departed spirit is victorious, and only by this name. The battles of the worthy form a most important and instructive portion of the Sacred writ of olden Egypt.

Every worthy one, man or woman, received the name of Osiris placed before his or her earthly name. If her name were *Maëmsek* on earth, then, at her removal to the Land of Divine Truth, she is called Osiris *Maëmsek*. A large wooden Osirid of a lady has this name in the museum. If his name had been *Annebmer*, it became Osiris *Annebmer*, etc.

The Osirid before us could have been used for either a man or a woman, for the place for the name is filled up as stated.

On the the left shoulder, where the hieroglyphic inscription begins—reading backwards, and from head to foot—is a declaration at once important and interesting: literally, "The causing to do all things in the south is of Amun Ra, the king of the gods." The word "south" tells us that this little image was made for the Theban market, in Upper Egypt. Amun Ra was also the name of God in Thebes; Amun meaning The Hidden One, and Ra, the Sun, not the sun of our world; for, in the Sacred Book of Olden Egypt, the Meadow of Ra is in the future world. God is thus presented to us here as the Hidden One (Amun), and as the Sun (Ra) of the Land of Divine Truth.

They are called gods, in the Sacred Book, who are ordinary human beings, but are now spirits, and have been pronounced true at the judgment seat in the Hall of Truth.

God is here brought forward as working in a hidden manner, bringing about all that is done in upper Egypt. This limitation is added by the scribe of this particular Osirid. In like manner he limits the meadow to the south. In the Sacred Book this limitation is not made. The scribe was making an image for a south purchaser.

In the same book the new comer is never seen pictured with his little image in his hand; but he is himself drawn as formed into an image and likeness of God by the divine hands: an impressive drawing. His protection against the troops of the devil is not there made to depend upon these little osirids, but upon being himself in the likeness of God.

The images, therefore, were laid away with the cast-off bodies, never to be resumed, as we might bury with our dead the sacred cross, signifying thereby our own faith in him who died thereon, and our trust in him as the Resurrection and the Life.

This statuette, like hundreds of others, is blue—the color of heaven. Often the soul is pictured as of a blue color, while the body is colored an earthly red. The desire of the departed to be remembered is very tender, and tenderly expressed. He wishes, in his new home, to be remembered by his friends on the banks of the dear old Nile, whenever they are having a joyous time there—wishes to have his name spoken where he once so loved to be. The date of this image is about B. C. 300—2200 years old. It was made in the Low Epochs. This I know from several hieroglyphs—four in all—never found in high Pharaonic ages.

#### THE ANDOVER OSIRID.

This also is of blue earthen, with black hieroglyphs baked in, for all time. It is five inches and three-quarters long. It has

a long lock of hair from the top of the head to the right shoulder—the mark of a prince, and of the highpriest of Memphis and its nomes or counties. This, therefore, was made for Lower or Delta Egypt. It has the two garden tools and bag of grain. In addition, it has the broad, rich necklace, such as the king put upon the neck of Joseph.

*The inscription* is very simple, yet very important, for it dates this precious statuette B. C. 1333, or thereabouts: "The brightness of Osiris, the Son of the King, the Highpriest, Chamus, Pronounced True." Brugsch Bey tells us that this Chamus was the well-known son of Ramses II, who lived about the time of the Israelitish exodus.

#### GENUINENESS OF BOTH STATUETTES.

Both are genuine—are not modern manufactures. This I know from many years of familiarity with the unquestionably genuine monuments of the Boston collection.

The easy carelessness of an original scribe and maker are inimitable; as, the omission of the plural mark at the foot of col. 1, because he came short of room (!); his spelling the same word twice over with two kinds of hieroglyphs, for no purpose whatever except that the group looked pretty (!); his reckless writing of one hieroglyph at the foot of col. 5 and its mate at the top of col. 6 (!), and this because the effect pleased his fancy (!). Just such things as these are always peeping out of every genuine hand-made text,—not merely in hieroglyphic ones. The West Bridgewater text is very beautiful. But the great centuries have gnawed even into both of these glass-hard relics.

We have carefully detailed our account of these two monuments, because they are in no public collection, and because, from their long travel—one coming to us from the very days of the going forth out of Egypt—they deserve all the notice that can be given to little wanderers from so far off times.

## HUMAN SACRIFICES IN ANCIENT TIMES.

*From the Anales del Museo Nacional de Mexico.*

BY SEÑOR MANUEL OROZCO Y BERRA.

TRANSLATED BY L. P. GRATACAP.

I reserve for another occasion the description of the horrid slaughter committed at the dedication of the great *teocalli* of Tenochtitlan, since the heart is saddened with melancholy at its relation and the mind bewildered in contemplating the excesses of the arrogant spirit of man; yet the opportunity appears to me propitious to raise a voice in favor of the American nations, defending them against the sweeping charges made against them in the name of the moral law, on account of their human sacrifices, and their so-called cannibalism. Already our compatriots Clavigero and Dr. Fernando Ramirez have spoken on this point and their enlightened works will serve me as a guide.

"There has been" says Clavigero, "no nation in the world which has not sacrificed human victims to the demands of its religion. The Bible tells us that the Ammonites burned up their sons in honor of their God Moloch, and that other peoples of the land of Canaan did the same. The Israelites at times followed these examples. It is stated in the fourth Book of Kings that Ahaz and Manassah, kings of Judah, used this Gentile right of offering up their sons in the flames. The expression of the sacred text appears to indicate rather a lustration or consecration than a holocaust; but the 105 Psalm leaves us no longer in doubt that the Israelites really sacrificed their sons to the gods of the Canaanites, the stupendous and striking miracles worked by the omnipotent arm of the true God not sufficing to restrain them from this barbarous superstition.

Of the Egyptians, we know by the testimony of Manetho, the celebrated priest and historian of that nation, quoted by Eusebius of Cesarea, that each day three human victims were immolated in Heliopolis to the goddess Sati Juno. It was not only the Ammonites, the Canaanites and the Egyptians that worshipped in so inhuman a manner their gods Moloch, and Juno, since the Persians had similar sacrifices to Mitia, or the Sun; the Phœnicians and the Carthagenians to Baal, or Saturn; the Cretans to Jove; the Spartans to Mars; the Phocians to Diana; the Lesbians to Bacchus; the Thessalonians to the centaur Chiron, and to Peleus; the Gauls, the Germans, and other nations to their tutelar deities. Philo says that the Phœnicians in their public calamities offered up to their cruel Baal, their most beloved sons; and Curtius affirms that the Tyrians did the same, up to the

conquest of that famous city. Their compatriots the Carthaginians observed the same rite in honor of Saturn the Cruel, called so justly. We know that when they were conquered by Agathocles, king of Syracuse, in order to mollify their gods whom they thought were angered with them, they sacrificed two hundred noble families, likewise three hundred youth, who spontaneously committed themselves to the flames to give this proof of their valor, their piety towards the gods, and their love of country; and, according to Tertullian who, as an African, and only shortly subsequent to this period, should know, these sacrifices were used in Africa unto the time of the emperor Tiberius, as in Gaul up to the reign of Claudius, according to Suetonius."

The Pelasgians, ancient inhabitants of Italy, in obedience to an oracle, sacrificed the tenth part of their sons, as Dionysius of Halicarnassus states. The Romans, who were so sanguinary and superstitious, understood these sacrifices. During the entire period of the kings they immolated infants in honor of the goddess Maia, mother of the Lares, as a prayer for happiness in their houses.\* According to Macrobius, an oracle of Apollo counselled this practice. From Pliny we learn that up to the six hundred and fifty-seventh year of the foundation of Rome human sacrifices were not prohibited. Nor did the instances of this barbaric rite cease entirely, since Augustus, according to various writers cited by Suetonius, sacrificed in honor of his uncle Julius Cæsar, apotheosized by the Romans, three hundred men, part senators and part knights, chosen from the family of Antony, upon an altar erected to the new god.

Lactantius Firmianus, who was thoroughly acquainted with the Roman people and who flourished in the fourth century of our era, expressly says that also in his time these sacrifices were made in Italy to the Jupiter Latialis. Neither have the Spaniards kept themselves free from this horrible contagion. Thus, the Lusitanians sacrificed their prisoners, cutting off the right hand to consecrate it to their gods, observing their entrails and preserving them as auguries. All the inhabitants of the mountains sacrificed their prisoners with their horses, offering them up one hundred at a time to the god Mars, and speaking in general, it is said that it was peculiar to the Spaniards to sacrifice themselves for their friends. Similarly Silio Italica relates of his ancestors that when youth was passed, they killed themselves, and that, by so doing, received a eulogy for heroism.

Coming down to later times, P. Mariano speaking of the Goths who occupied Spain, says: "Since they were persuaded that there would be no favorable issue to the war unless human

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\*A similar practice existed among the Mexicans, who on certain feasts offered to the gods infants dressed in flowers and borne on litters for this revolting ceremony.—*Translator.*

blood was offered up for the army's success, they sacrificed their prisoners of war to the god Mars, to whom they were particularly devoted, and at the same time they were accustomed to set apart for him the best of their booty, and to suspend from the branches of the trees the skins of those they slew." If the Spaniards who wrote the history of Mexico had not forgotten this, and had kept in mind what has happened in their own land, they would not have been so astonished at the sacrifices of the Mexicans."

Leaving Clavigero, we find in César Cantú, "Most people have sacrificed human victims. Phœnicians, Egyptians, Arabs, Canaanites, the inhabitants of Tyre and of Carthage, Persians, Athenians, Spartans, Ionians, all the Greeks of the Archipelago and of the mainland, the Romans, Ancient Britons, Spaniards, Gauls, all have been equally involved in that frightful custom. To gain the favor of the gods, the king of Moab offered up his son as a holocaust upon the walls of his capital, besieged by the Israelites, which deed caused so much terror to the besiegers that for the time being they raised the siege. It is impossible to repress a thrill of horror on reading those authors, both ancient and modern, who describe human sacrifices in vogue since the most remote ages and to-day practiced in India and in the interior of Africa. It is unknown who was the first that instituted this abominable barbarity, but whether it were Saturn as Pausanias appears to indicate, it is certain that this custom has deep and strong roots. The immolation of human victims was one of the abominations that Moses rebuked the Ammonites for. The Moabites sacrificed babes to the god Moloch, which cruel custom obtained among the Tyrians and Phœnicians, and the Hebrews borrowed the same from their neighbors.

We might add more but we content ourselves with quoting the following paragraph of Señor Ramirez: "In fine putting one side the only historic tradition that would conduct us in our studies to a time more remote than that of the sacrifice attempted by Abraham, and regarding only those proofs which are preserved and that we can judge for ourselves, it is truly worthy of attention that the evidence as to the existence of human sacrifices is seen in monuments which in turn are unmistakable witnesses to the high civilization reached by the people who erected them. The stupendous ruins of Persepolis, that carry us so many ages beyond Alexander, have perpetuated in their magnificent relievos the memory of human sacrifices. The same is reproduced in the paintings found in the sepulchres of the kings of Thebes, leaving no doubt, says Baron Humboldt, that the Egyptians used these sacrifices. Examples of them are found amongst the ruins that cover the island Phila or Philæ, whose finished relievos and carved marbles bring us to a more

modern time, covering a period of five thousand years. In fine, the ancient and mysterious India shows us in the collar of human skulls which adorn the neck of the goddess Kali or Bhavani, as well as in the sculptures of the elephant, the practice of the mysterious discourses contained in their sacred books. For as far as concerns the peoples called modern, regarding them as the nursery whence emerged the nations that to-day carry the standard of civilization, it is very easy to show with their own history that not one of them has escaped that baptism of blood which forms one of the steps in the scale of social progress which none have the privilege to omit."

From the uniform testimony of authors it is to be inferred that the practice of human sacrifices has been common in the old and new world. Can we conclude from its universality that the custom is an excellent one? By no means; the repetition of a criminal act neither justifies or improves it. But it can be established that in raising a cry against the Americans for this atrocity, the Europeans commit an act of injustice and of irreflexion, attributing to them as a peculiar crime that which is as distinctively their own.

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### TEUTONIC MYTHOLOGY.

BY RASMUS B. ANDERSON.

A lively discussion in regard to the origin of Teutonic mythology has recently been commenced in the European press, and the most startling theories are being suggested.

According to the old theory, there was a time when all the Teutons, that is to say, the Germans, the Anglo-Saxons, the Danes, Swedes, Norwegians, etc., had a common mythology, when the kings among all their people traced their descent up to Odin and the gods of Asgard. The memory of this religion was wholly lost and we have no record of it in the medieval literature of continental Europe. England, Germany and the Scandinavian countries of the continent furnish us with legends, weird superstitions, and a vast number of folk-stories, all fragments of the ancient religion, but it would be impossible from these fragments to construct the wondrous mythological edifice of our forefathers. Indeed, had we only these traditions and popular tales and superstitions to depend on, nine-tenths of the system would be utterly lost and the remaining one-tenth would be incomprehensible.

Faithful Iceland is the Patmos where a record of the Teutonic religion was made and preserved to us, mainly in the

Elder and the Younger Edda. The two Eddas are, so to speak, the Bible of the Odinic faith, and while the Elder Edda corresponds in many respects to the Old Testament, the Younger Edda is no less unlike the New Testament of the Christian Bible.

Ever since these Eddas were discovered they have been made the subject of extensive and critical investigation as to their origin and significance. Their genuineness and antiquity were disputed by the Germans, Schlözer, Adelung and Rühls, but the objections of these men had no lasting influence, and their learning was of so superficial a character that the raid they made on so precious a folk-treasure as the Eddas made no visible impression. Then came Jacob Grimm and his school and demonstrated to the world what power of reconstruction there is in intelligent scholarship and laborious research. When he brought daylight into the study of medieval literature and Teutonic antiquities, such stars as Schlözer, Adelung and Rühls vanished out of sight. The scholars of Germany, Scandinavia and England soon accustomed themselves to regard the myths of the two Eddas and the Latin version of old Norse ballads, by Saxo Grammaticus, as something very old, very national and as the common inheritance of the whole Teutonic race. The Eddas and the Saxo Grammaticus were looked upon as the solid rock of Teutonism. The Eddas and Saxo were indeed regarded as a faithful mirror of the Teutonic religion as it developed itself in the north of Europe, but essentially the same gods were adored and the same forms of worship prevailed in the other Teutonic countries, so that while the Icelandic records gave a *perfect* picture of Scandinavian mythology, they also reflected with some degree of fidelity this old religion as it had existed in Germany, England and other Teutonic countries.

Just now a new raid is being made on this Odinic religion. Professors Sophus Bugge and A. Chr. Bang have recently proclaimed to the world that the Eddas are not an original Teutonic production. These scholars now present the startling claims that the asa-faith, of which we as Teutons have boasted so much, is all borrowed from Greek-Latin, Jewish-Christian and Keltic sources. Loke, they say, is Lucifer, Balder is Christ, his name being derived from the Anglo-Saxon Bealdor, meaning Lord. Angantyr is the Kentaur with the Keltic article *in* prefixed. Lodyn is simply Latona, etc. The Vala's Prophecy in the Elder Edda which has so long been looked upon as the most venerable morsel of literature from the hoary past of Teutondom now turns out to be merely a Norse version of the Sibylline oracles. The death of Balder is only a somewhat mutilated version of the crucifixion of Christ. Thus they, with rude



hands, ruthlessly tear out scores of leaves from the works of Grimm, Keyser, Simrock, Holtzmann and other distinguished Teutonists, and tear up Teutonic chauvinism by the roots.

Mr. Bang is professor of orthodox theology, and as he recently published a large and exhaustive work on the historical evidence in regard to the resurrection of Christ, we might suspect him of a desire to make out a case in favor of Christianity. But Professor Bugge is one of the most profound linguistic scholars in all Europe. His researches in the field of mythology have given him a world-wide reputation; his edition of the Elder Edda, for instance, is the most scholarly one ever published, and he is in all respects a scholar so eminent that it will not do to question either his ability or impartiality. Professor Bang's lecture on this subject was published some time ago in Norway, and has already been favorably noticed by prominent scholars in Germany and in England. Professor Bugge's lectures have been but imperfectly reported, but the author is now publishing a revised edition of them to appear simultaneously in Norway and Germany, in March. When the work appears we may, indeed, look for a real mythological sensation in literature.

While Bang and Bugge now bring the question prominently to the attention of scholars everywhere, it may be worth our while to take a retrospective glance and notice what suggestions have been offered by other writers, suggestions that doubtless have not been without some influence on the minds of Bang and Bugge. Thus a Danish scholar, E. Jessen, has for several years with great acumen argued that the lays of the Elder Edda are indebted for much of their material, not only to German heroic songs, but also to Roman and Christian traditions.

In this connection Mr. Jessen points out with special emphasis the fact that words of Latin origin are used in the the Elder Edda. The eminent Norse scholar in Munich, Professor Konrad Maurer, expressed his doubts in regard to the antiquity of the Eddic rhapsodies more than ten years ago. Gudbrand Vigfurson, of Oxford University, an Icelander by birth, and editor of Cleasby's Icelandic-English Dictionary, recently published the *Sturlunga Soga*, one of the most prominent Icelandic Sogas, and in his elaborate *prolegomena*, he expresses the opinion that the larger number of the Eddic lays originated in the British Isles, while a second part were of Norse and a third of Greenland origin.

Professor Sars, in Norway, in his valuable history of Norway, published half a dozen years ago, called attention to the fact that the songs of the Edda must not be looked upon as the expression of an original and popular Teutonic faith, but they

must be regarded as a product of the restless vikings, and that doubtless Christian ideas have greatly influenced their composition. Edzardi derives the Norse scaldic metre from the Irish,\* and in 1876 Henry Peterson published a work on the religion of the Norsemen, in heathen times, in which he tries to prove that the popular faith that prevailed in the North was one totally different from the one presented in the Eddas, and suggests that the latter is merely a mythological composition imported from Germany or England. It is but fair to say that it is these and other statements and suggestions that have stimulated Professor Bugge to make a careful examination of the whole subject and put it in a systematic and concentrated form within the reach of all who may be interested in the subject, and we look with impatience for the appearance of his work. Meanwhile we may take a look at the other side of the question.

It is a well-known fact that the Teutonic languages belong to the Aryan or Indo-European family of languages. With the telescope of comparative philology, we have been able to determine with certainty that the Aryan languages all have a common origin. It is also reasonable to suppose that many of the social political and *religious* ideas and customs among the various branches of the Aryans have a common origin in the cradle life of the race. We do not say that the English word *mother* is derived from the Latin *mater*, but that both of these words have grown out of one common root. Thus when we find that a Norse tale or myth is very like a Greek. Roman or Keltic tale or myth, we cannot see that this necessarily proves that the Norse is derived from the Greek, Latin or Keltic. It may simply be evidence of a common source of the two. The similarity of Thor and Hercules, of Loke and Prometheus, of Balder and Patroklos, seem to me to be conclusive evidence that, when we go back far enough, Greek and Norse religions were one. Thus it is possible that the Teutonic Niblung story, the Greek Iliad and Odyssey, and the Hindooic Mahabhārata and Ramayana were, once upon a time, one and the same story, and the stories themselves may be found upon a careful examination to be not more unlike than the languages in which we now read them. Our readers must not for a moment suppose that the identity of Greek, Roman, etc., and Teutonic myths is a discovery just now made by Professor Bugge. The facts upon which Bugge bases his startling conclusions have long been recognized, and he is simply making a new application of them, while it may appear that he has added somewhat to the number of parallel myths. Already in 1859 the erudite German scholar Dr. J. G.

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\* Professor Rhys, of England, goes so far as to claim that the word Edda is of Irish origin.

Von Hahn published his "Mythologische Parallelen," which, in 1876, was embodied in his more elaborate work entitled "Sagenwissenschaftliche Studien." In this work he has pointed out more than twenty cases of identities of Greek and Teutonic myths, applying these to prove the common origin of the two mythological systems.

The mutual influence of the Christian religion and Teutonic heathenism upon each other has also long been understood by theologians and by mythologists, and it was especially emphasized by the great German scholar, Jacob Grimm. But it never occurred to him, when he found Christian elements engrafted on the decadent Odinic tree of faith, to suggest that the Balder-myth was taken root and branch from the Jewish Christian religion. That many of the ceremonies connected with the great festivals of the Christian church are of a Teutonic heathen origin we think all will admit. Is not the Christmas tree a shadow of the great ash Ygdrasil.

Thus it may be that while the great all-universe embracing ash-tree Ygdrasil when it had attained its full growth and was beginning to decay, had some new elements of life engrafted into its sap and fibres, especially by the Christian missionaries and by the vikings who traversed all seas and lands, but that wonderful tree itself, with all its great branches towering to heaven and spreading over all the earth, has its roots in the cradle-life of the Aryan race, and has been nursed and sprinkled with the water of life by our stalwart Teutonic ancestors, and as such is a most precious inheritance. We warn our readers not to be *too hasty* in embracing the new doctrine now presented by Bang and Bugge, while it is not impossible, that, when we have read Bugge's great work, which is soon to appear, we will have to go over to his camp, bag and baggage.

THE ANTIQUITY OF SACRED WRITINGS IN THE VALLEY  
OF THE EUPHRATES.

BY O. D. MILLER.

The existence of sacred writings in the country of the Euphrates, at a period certainly anterior to Abraham's departure from "Ur of the Chaldees," is reasonably to be inferred from the evidences afforded by the cuneiform inscriptions. From the known intercourse of the Hebrews with the Babylonians, at different periods, dating from the earliest epochs; and from the numerous analogies existing between the sacred traditions inherited alike by the two peoples, and recorded in the sacred writings which each had preserved independently of the other, it is obvious that the origin of these sacred books, as preserved independently by the two peoples, must be assigned to nearly the same antiquity. This is rendered all the more probable from the fact that Abraham, during his earlier sojourn in the country of Ur, on the lower Euphrates, must have been familiar with the Chaldean Sacred Oracles; and now that the use of *papyri* by the Chaldeans from the earliest period has been fully shown, it is by no means impossible that Abraham carried copies of these sacred books with him, on his departure for the country of his future inheritance, and that of his descendants. It will be seen, at least, from the foregoing hints, that the question of the antiquity of sacred writings in the country of the Euphrates, has a direct bearing upon the theories recently put forth by critics, assigning an extremely modern date, comparatively speaking, for the origin of the Books of Moses; and it is proposed in the present article to place before the readers of this journal the leading facts, derived mainly from the inscriptions, tending to establish the high antiquity of the sacred writings, as known to have been preserved by the Babylonians.

In Berosus' account of the deluge, there are three distinct allusions to the existence of sacred books, which, as they are connected with later traditions to be noticed, are reproduced here. It is stated that Cronus appeared to Xisuthrus in a dream, warned him of the coming deluge, and "He bade him bury in Sippara, the City of the Sun, the extant writings, first and last." Again, after Xisuthrus had been translated, his voice was heard by his companions, bidding them to "Return to Babylon, and recover the writings buried at Sippara, and make them known among men." Finally, it is stated that they went their way to Babylon, "and, having reached it, recovered the buried writings

from Sippara, and built many cities and temples."<sup>1</sup> Now, while modern critics have attached no weight whatever to this tradition of the sacred books as transmitted to us by Berosus, it seems to be well established from the inscriptions, that the ancient monarchs of Babylon entertained a firm belief in the existence of such writings, which had been preserved during the deluge, and transmitted to after ages. We refer here to the well-known inscription of Nabonidus, touching the sacred tablets supposed to have been deposited in the foundations of the temple *Ul-bar*, and giving an account of the excavations made at different periods to discover them. We cannot introduce the matter better than in the language of M. F. Lenormant, as follows:

"This history of the tables containing the principles of all knowledge, revealed by the theophanies of Anu (Gr. *Oannes*), which had been buried by Xisuthrus at the time of the deluge, in order that they might be transmitted to the post-diluvian world, had been, as we have shown, the source of the legend quite similar, relating to the columns of Thoth or Seth in the land of Siriad, to which the Pseudo-Manetho alludes. Josephus says that these pillars existed even in his time; and here we believe to have again a Babylonian tradition attaching itself to a real fact, which is revealed to us by the fragment of the barrel\* (inscribed cylinder) of Nabunahid, discovered at Mugheir, the ancient Ur, now preserved in the British Museum.<sup>2</sup> We learn from this, in effect, that when Sagaraktiyas, a king of the first historical dynasty of the Chaldeans, who was certainly contemporaneous with the kings of the ancient empire in Egypt, reconstructed the pyramidal temple of the goddess Ammis, called Ulbar, situated in that part of Sippara known as Agani; he made certain mysterious tablets in imitation of those carried by Xisuthrus from Larsan (modern Senkereh), his native city, to Sippara; and buried them under the corner stone (*temin*) of the temple Ulbar. These tables were probably thought to be copies of those that had been buried at the time of the deluge; and thus the king, himself really historical, thought to give to his reconstructed edifice a more august consecration, in realizing a fabulous tradition. In the course of centuries these tables buried by Sagaraktiyas had become themselves famous and legendary; they had come to be regarded, probably, as the originals of those of Larsan, hidden for the first time by Xisuthrus.

1. See Rev. G. Rawlinson's "Five Monarchies," etc., vol. I, pp. 145-146.

2. 1 R. Pl., 69.

\*NOTE.—Beside the ordinary brick and slabs employed for the inscriptions, there were the prism and barrel, used for the same purpose. They take their names from their forms. The "prism" has an octagonal or hexagonal form, varying from a foot and a half to three feet in height, made of terra cotta, or burnt clay, its plane surfaces covered with an exceedingly fine writing, often requiring a good magnifying glass to read it. The "barrel" was in all respects similar, except that its diameter was greater in the middle than at the ends, being exactly the form of a barrel, except the flat surfaces. The prisms and barrels were usually deposited in the corners and in the foundations of the temples.

Thus, at an epoch anterior to the 13th century before our era, the king Kuri-galzu, who appertained to the fourth or fifth dynasty of Berosus, made excavations in the mass of the pyramid in search of these tables, but without success. Similar labors were undertaken by the kings of later periods, always for the same purpose, yet with no result. It was only at the period shortly before the reign of the Babylonian power that Nabunahid, after protracted efforts, succeeded finally in discovering the tables buried by Sagaraktiyas."<sup>3</sup>

We give below a translation of the inscription of Nabonidus, so far as relates to these tables, following the versions by Lenormant, Oppert, and Menant. It will be seen to be very fragmentary. Nabonidus proceeds thus:

"The tables of Larsam had been deposited under the corner-stone (*temin*) of the temple Ulbar, at Agani, in ancient times, by Sagaraktiyas, king of Babylon, and Naram-Sin, his son, my predecessors; they had not seen the light before the glorious day of Nabunahid, king of Babylon. Kuri-galzu, king of Babylon, who preceded me, made search for them, but he did not find the corner-stone of the temple Ulbar, and thus he made this inscription: 'I have searched for the corner-stone, and I have not found it.' *Assur-akhi-idin* (Asarkaddan), king of the country of Assyria, king of legions, made search for them" (the tables).

Three lines wanting, when the text begins again as follows:

"Nebuchadnezzar, king of Babylon, son of *Nabu-pal-asar*, my predecessor, with the aid of his army, searched for the corner-stone of the temple Ulbar, and did not find it. And I, Nabunahid, king of Babylon, restorer of *Bit-Saggadhu* and *Bit-Tida*, in my victorious years, adoring Ishtar of Agani, my mistress, I have caused a pit to be excavated. The gods Shamas and Bin directing me, I have searched for the corner-stone of the temple Ulbar, for my own happiness. With the constancy worthy of a king I have directed my army in the search for this corner-stone, where Nebuchadnezzar during three years (180 days ?) had opened a trench for the excavations. They have explored to the right and to the left, before and behind; and I have searched, and *I have not found it*. Then they say: 'We have searched for this corner-stone, and we have not found it. The tempest of waters has inundated everything, and has ruined all.'

There occurs now a long fracture in the text, in which, probably, the monarch gave the details of a renewed search, for when the text becomes again partly legible, we read:

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3. *Fragments Cosmogoniques de Berosé*, pp. 291-293.

" . . . the temple of Sin . . . and this temple . . . of the temple Ulbar . . . for the construction of this temple . . . I have found the corner-stone of the temple Ulbar ! and have read the name of Sagaraktiyas at the bottom."<sup>4</sup>

There then follows the memorial inscription of Sagaraktiyas, copied by Nabonidus, after which he says: "I have replaced in the foundations the Barrel of the East, the Barrel of the West, and the foundation stone in front," etc.<sup>5</sup> On account of the fragmentary condition of Nabonidus' inscription, some mistakes have occurred in its rendering heretofore. It is certain, for instance, that Naram-sin was not the son of Saga-raktiyas, but of Sargon, the ancient, king of Agane. On the other hand, it is certain that the name Saga-raktiyas occurs in connection with the memorial cylinder discovered and copied by Nabonidus.<sup>6</sup> But Saga-raktiyas is placed several reigns after *Kuri-galzu*, even, by Mr. Smith; hence it is necessary to conclude that the tables of Larsam were deposited in the foundations of the temple Ulbar by Sargon, the father of Naram-sin.

It will have been noticed in the extract from Mr. Lenormant that he regards the tables of Larsam as pure inventions, on the part of Sagaraktiyas, being led to this conclusion, perhaps, from the fact that Nabonidus does not state, so far as the fragments of his inscription enable us to judge, that he actually found these tables. He merely copies the private inscription of Sagaraktiyas. But Nabonidus does speak of the "Barrel of the East and the Barrel of the West." If the inscription was entire, it is probable we should find some express allusion to the tables of Larsam, if, in fact, the two barrels are not to be identified with them. It seems, moreover, that the tables of Larsam were deposited, not by Sagaraktiyas, but by Sargon, the ancient; and this may account for the fact that they are not mentioned in connection with Sagaraktiyas. There is, then, much uncertainty respecting these tables. But we cannot believe that a deception had been perpetrated, on the part of the ancient monarch. Certainly *Kuri-galzu*, *Asarhaddon*, *Nebuchadnezzar*, and *Nabonidus*, were sufficient judges whether genuine sacred tablets had been deposited in the foundations of the temple Ulbar, in *Sippara*, the "City of the Sacred Books." But, in point of fact, the statement of Nabonidus is positive, that the "Tables of Larsam had been deposited under the corner-stone of the temple Ulbar, at Agani, in ancient times, by Sargon (or Sagaraktiyas), king of Babylon, and Naram-sin, his son," and this statement was made after his search for the corner-stone. Had there been any mistake or deception in the matter, he would have discovered it, and so stated it. At this early epoch, then, it is safe to

4. See Menant's *Babylone et La Chaldée*, pp. 256-257.

5. *Ibid.*, p. 258.

6. See Mr. Smith, in *Trs. Soc. Bib. Arch.*, i, p. 66.

assume that sacred writings existed in the valley of the Euphrates, and, according to all appearances, they had been handed down from a much earlier period, if not even from the antediluvian era.

As regards the date of Sargon's reign, that is, the elder Sargon's, much difference of opinion exists among Assyriologists. The English are accustomed to place him in the 16th century B. C., while the French, including MM. Lenormant, Menant, and others, with much more reason, as we believe, assign him to the period about 2000 years B. C. They assign Sagaraktiyas to about the same epoch. Thus, the existence of sacred writings in Babylonia, 2000 years before our era, seems to be quite well established.

But we have an important confirmation of the position we have assumed, in the late discovery of the "Creation Tablets" and the "Izdhubar Series," or "Deluge Tablets," by the lamented Mr. George Smith. This author believes that the originals of the "Izdhubar Series" were written soon after the death of this hero, whom he identifies with Nimrod, the founder of the Babylonian kingdom.<sup>7</sup> As this account of the deluge formed part of the sacred writings, we must assign the latter to a period much earlier, even, than that of 2000 B. C. At a later period, however, and in his "Chaldean Genesis" Mr. Smith submits a chronological scheme, in which he assigns the origin of the "Deluge Tablets" to the epoch 2000 B. C., as the lowest date, and the "Creation Tablets" to the era between 1850 and 2000 B. C.<sup>8</sup> But these dates appear to have been adopted as the lowest possible, out of consideration for the ordinary Biblical chronology; it is obvious that, in the author's real opinion, these documents appertained to periods some centuries earlier. It should be stated in this connection that the French Assyriologists generally assign dates for the early events and personages some five or six centuries prior to those fixed by the majority of the English school.

It results, now, from these investigations, that as early as the time of Kuri-galzu, 1350 B. C., the Babylonian monarchs were found employing their armies searching for sacred writings, which were supposed to have been deposited in the foundations of a temple which had long before fallen to a mass of ruins; writings, in fact, whose originals were believed to have been inherited from the period before the deluge, and whose copies dated from the epoch not less than 2000 years B. C. Entirely independent of this testimony, we trace the existence of documents at a period still more ancient, containing an account of the deluge, whose analogy with the Mosaic record of the same events is so striking as to enforce the conclusion of the common

7. Assyrian Discoveries, pp. 204-207

8. Chald. Genesis, pp. 27, 28.



origin of the two narratives. Then we have the history of the creation, and of the fall of man, exhibiting the same analogies in all the details, between the Mosaic and Babylonian accounts, and dating from about the same epoch. In the two Babylonian documents, the one appertaining to the history of the creation, the other to that of the deluge, the analogies with the Mosaic record of the same events are so numerous and so exact, that it is impossible to trace the two accounts to different *original* sources. Hence, if we admit for one an antiquity of 2000 years before our era, we must assign the same antiquity to the other. It is inconceivable, under such circumstances, that the Mosaic record actually originated only after the lapse of centuries from this date. One of two positions has to be assumed here: either one record was copied from the other, or both had been derived originally and separately from the same ultimate source. In our opinion, for which, if we had the space, very substantial reasons could be given, the Hebrew-speaking Semites had preserved one account, and the Assyro-Babylonians another, both having been derived from one and the same original source. However this may be, that Abraham, before his departure from Ur, on the lower Euphrates, was familiar with documents whose contents were subsequently known under the form they take in the book of Genesis, seems fully established by facts with which every Assyriologist is familiar. That *papyri* were in use at this early period is sufficiently evident from the investigations of both Rev. A. H. Sayce and Dr. Talbot.<sup>9</sup> That the Abrahamites, therefore, possessed copies of the sacred writings before their departure from Ur, is not at all improbable. The book of Genesis is made up of three chief narratives. *First*. The history of the creation and of the fall, accompanied with the antediluvian genealogy. *Second*. The account of the deluge and of the settlements of the posterity of Noah, the construction of the tower, etc. *Third*. The history of Abraham and his descendants, of the sojourn of the Israelites in Egypt, till the time of Moses. The subject matter included under the first and second heads must have been familiar to Abraham, if from no other than from the Babylonian sacred writings, whose existence in his time is now a matter of fact. The matter included under the the third head must have been familiar to Moses, if the family of Abraham had kept the least account of their varied fortunes, and if his immediate posterity had done the same; and it is impossible that they should not have done so. Thus, Moses had at his command, beyond any doubt, all the materials that we find to-day embodied in the book of Genesis, and this book, therefore, undoubtedly dates from the time of Moses.

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9. See Trs. Soc. Bib. Arch., i, pp. 343-345, and iii, pp. 490-497.

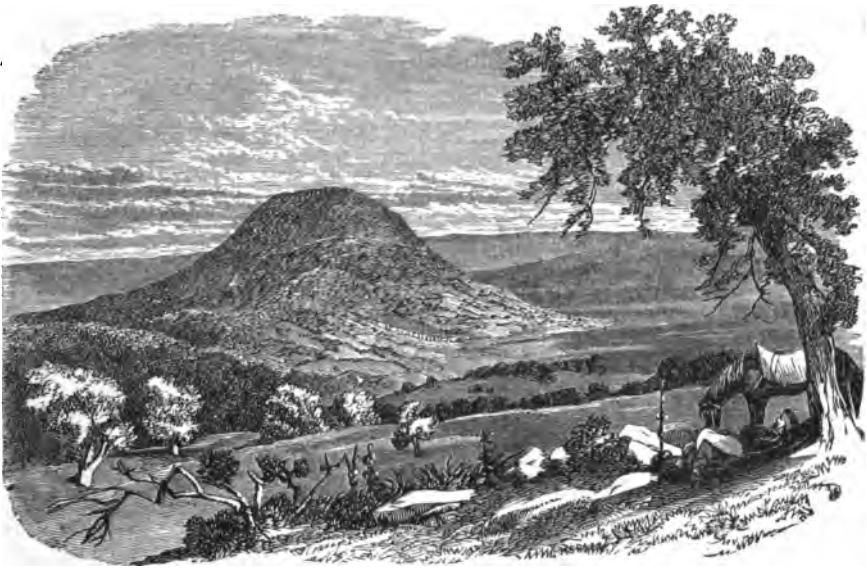
## A CINERARY URN.

BY REV. SELAH MERRILL, D. D.

Among the relics which I brought from the east is a pottery jar which would hold about three pints. It is globe-shaped, with one handle, a small neck and a flaring mouth. The width of the opening is one and one-half inches, and the height of the jar is eight inches. When found it was full of very fine ashes. I stopped the mouth of the vessel, but a good deal of the dust sifted out and was lost on the way home. A double-handful remains, however, and portions of this have been subjected to a careful examination. The analysis shows that the powder, or ashes, is of an animal and vegetable origin. The vessel is of such a great age that it is decomposing in our atmosphere. I suspect that this jar is a "cinerary urn," and contains the ashes of some person who was cremated in ancient times. The real nature or importance of the object did not occur to me when I found it. I do not think I regard it now with anything like sacred feelings, yet my imagination is strangely busy when I reflect upon what these silent ashes may have been. The jar stands quietly in my cabinet, and I consider myself the owner of the mysterious dust which it contains, and I hope that no ghost will ever appear to dispute my claim. I found the jar in Egypt. In 1874-5 a short piece of railroad was built connecting the one leading from Alexandria to Cairo with that leading to Ramleh, I believe. Near Alexandria a cutting had been made through a hill, which was from forty to sixty feet high. On the top were some ruined military earth-works. At a depth of about thirty feet from the top of the hill an old grave-yard had been struck and cut through, so that the level of the road was twenty feet below it. The coffins were all of terra-cotta. There were six, and, at one point, as many as eight tiers of coffins. One tier would be cross-ways of the one below it, and they were all laid, apparently, without any regard to the points of the compass. Multitudes of the coffins had been broken, and the debris was abundant. Great numbers projected from the banks, and were still perfect. A number of these I broke open, but found generally in them no remains except a little fine dust. In some cases, however, I found small pottery objects, vases, bottles, etc., placed about where the heads of the dead body would lie. These objects were unmistakably Egyptian in their ornamentation. The coffins themselves, perhaps I ought to state, had no ornamentation so far as I observed. In the coffins I found also the remains of what were doubtless personal ornaments, bracelets, rings, etc., mostly of copper.

When the cutting was first made through the old graveyard a number of valuable objects were found, which went immediately into the collections of private individuals, English, French, or others. Just beyond these beds of coffins, near the foot of the present hill, and about on a level with the road-bed, there were the remains of what had been several furnaces. These, being found so near the coffins, were much more interesting than the coffins themselves. So far as I could judge of their original form, they were six feet deep, three or four feet in diameter, and shaped at the base like the big end of an egg. The form of the top I do not know. They were built of large brick, and a glance revealed the unmistakable fact that they had been subjected to very great heat. By the heat, possibly aided by age, the bricks forming the walls of these furnaces, had been concreated into a solid mass. These furnaces, if they were such, were considerably below the present surface of the hill, and also considerably below the level of the lowest tier of coffins. They may originally have been situated on a plain, or at the foot of a small hill on the top of which would be the cemetery. How the graveyard came to be buried thirty or more feet below the present surface of the ground is something which I do not attempt to explain. The fact, however, is well known to explorers in the East, that one must penetrate far beneath the surface if one would find the genuine remains of remote antiquity. The excavations that have been made at Mycenæ, Ephesus, Troy, in the valley of the Tigris, in Egypt, and in Palestine as well, all prove the truth of the statement just made. It is well known that at Jerusalem, excavations were carried to a depth of sixty, and even to eighty and ninety feet, before the original rock and ground work was struck.

I have endeavored to state all the important facts connected with the locality where the jar or urn which I have described, was found. It was not taken from one of these coffins, nor from one of these furnaces, but from the earth very near the latter. The reader who is at all interested in these details, will be able from them, I trust, to form an intelligent opinion respecting what I call, with some hesitation, of course, a "cinerary urn," "the ashes of an unknown body that was burned," and "the furnaces that were used for the purposes of cremation."



## MOUNT TABOR FROM THE SOUTHWEST.

BY REV. S. D. PHELPS, D. D.

We have seen many pictures of this charming little mountain, but none that gives a better idea of it than this. It has an isolated position on the plain of Esdraelon, about twelve miles west of the Sea of Galilee. It is nearly two thousand feet above the sea-level, and unlike other mountains of Palestine, is wooded nearly to the top. It is several times mentioned in the Old Testament, but not once by name in the New. But our blessed Lord must have been familiar with it from childhood, as it is but six miles east of Nazareth, and in full view from the western bank of the Sea of Galilee. From the fourth century until modern times, it was regarded as the scene of our Lord's transfiguration. No place could be more befitting; and notwithstanding the objection urged on account of the fortress on the summit, we thought as we wandered around the brow of that summit, and saw how many retired and shady nooks were there—how many secluded spots of 'charming loveliness admirably adapted to such a celestial scene—it surely *might* have occurred here on this "high mountain apart." It was here or on a spur of Hermon yonder.

Tabor is associated with the warlike exploits of Deborah and Barak in the times of the Judges. As she gave the signal on

its summit, Barak with the troops rushed down the southern slope and met the mighty foe in the valley of Meggiddo where "the stars in their courses fought against Sisera," and where "the river Kishon swept them away—that ancient river the river Kishon."

It was a beautiful spring afternoon when we climbed up the winding and sometimes very rocky path to the summit of Tabor. A nearly level space half a mile long and half as broad at the top is surrounded by old walls and ruined structures, one of which is a Saracenic arch called the Tower of the Winds. These ruins are partly covered with tangled thickets of thorn, dwarf oak and rank thistles. Several deep cisterns or pits hewn in the rock are there. In the center of the area is an open space of garden-like beauty—a grassy lawn beaming with gay and lovely flowers. Amid the ruins is a habitation for one or two monks or hermits.

The views from Tabor are varied and enchanting. We remember well how eagerly we looked from the highest point toward the northeast, and with inexpressible emotions caught a first glimpse of the Sea of Galilee where its waters lave the shores near the sites of Capernaum and Bethsaida. The course of the Jordan for a long distance can be traced, and beyond it a boundless perspective of hills and valleys stretches over ancient Gilead and Bashan. Looking south, the broad and beautiful plain of Esdraelon spreads away to the hills of Samaria, an unbroken expanse of verdure, a velvet lawn of loveliness, soft, tranquil, dream-like and unencumbered, yet in ages past the battle-ground of nations. On its eastern border hang Little Hermon and the villages of Endor and Nain, and south of these rises Gilboa, whose "high places" witnessed the deaths of Saul and Jonathan. Further on are the mountains of Ephraim. Westward the eye sweeps across the plain to "the excellency of Carmel" and follows its bold ridge till its farthest northern slope dips into the Mediterranean Sea, which lies like a dark line in the purple horizon. The hills of Galilee intervene and enclose the memorable and pleasant village of Nazareth. Rich fields of blooming shrubbery break off at the north from which rise the Horns of Hattin known as the Mount of Beatitudes. Beyond are the ranges of Lebanon, one of the nearer heights crowned with Safed, "a city set upon a hill," and in the dim distance towers the cone of Mount Hermon, snow-capped and majestic, like a dome of glory. Thus "Tabor is among the mountains and Carmel by the sea." "The north and the south, thou hast created them; Tabor and Hermon shall rejoice in thy name."

## EDITORIAL NOTES.

## OUR FRONTISPIECE—THE TRANSFIGURATION.

We give as the frontispiece for this number a picture which contrasts strongly with that contained in the first. The one represented the earliest divinity of the Aryan races of the East, but the other represents Him who now rules as the Divine Master of the West. The one is heathen, the other Christian. No two pictures, perhaps, could show the difference between the religions of the two regions. The statue of the god Ayenar is as common at the East as the painting of the man Christ is at the West. The one represents idolatry, the other Christianity.

Nearly all the aboriginal religions of the East abound with images of beasts; often times these images are combinations of both animal and human forms. The Christian religion admits of no other image than that of the human form. In the one the animal seems to be humanized; in the other the human is deified. All religious founders have been in a sense deified after death, but none were ever transfigured in life. The event of the transfiguration is on this account very significant. It connects the whole of Christ's life with his death, and shows how important is the doctrine of the resurrection to the christian system.

As an historical event it was evidently correlated with the whole history of the past and the future of the church. Moses and Elias were the principal characters of the Old Testament, as Peter and James and John were of the New. The bright cloud also which came down and enveloped the three persons was similar to the Shekinah which first appeared in Eden, as well as to the cloud which led the Israelites through the wilderness. The voice was also the same voice which spoke out of the cloud on Sinai, and addressed the children of Israel in the wilderness.

The picture is an ideal one, but the scene itself was real. It is not Christian mythology which describes this event, but authenticated history. The artist has portrayed the scene according to the traditionary view, which was, that the other disciples beheld the scene, though at a distance. The picture is, however, remarkably free from conventionalities and church symbols. The customary corona even is absent. The drapery is appropriate, and probably in accordance with the time and country. One of the last pictures of the gifted Raphael, it shows the

influence which Christianity has had upon the art of his day. It also illustrates the wonderful contrast between the religious conceptions which have ruled in art. No one can examine the art or the architecture of the Orient, including even the best works of the classic lands, without realizing how much purer and better are the ideas which have controlled in Christian lands. Nothing could be more elevating than this grand picture of the transfiguration, and nothing shows, perhaps, the intrinsic differences between the religion which we have inherited and those which still exist in various forms both ancient and modern in all Oriental lands.

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#### THE BEAUTY OF THE DEAD SEA.\*

The Dead Sea is generally supposed to be the picture of desolation and death. Travelers however, state that there is a certain strange and melancholy beauty about it which impresses the one who beholds it.

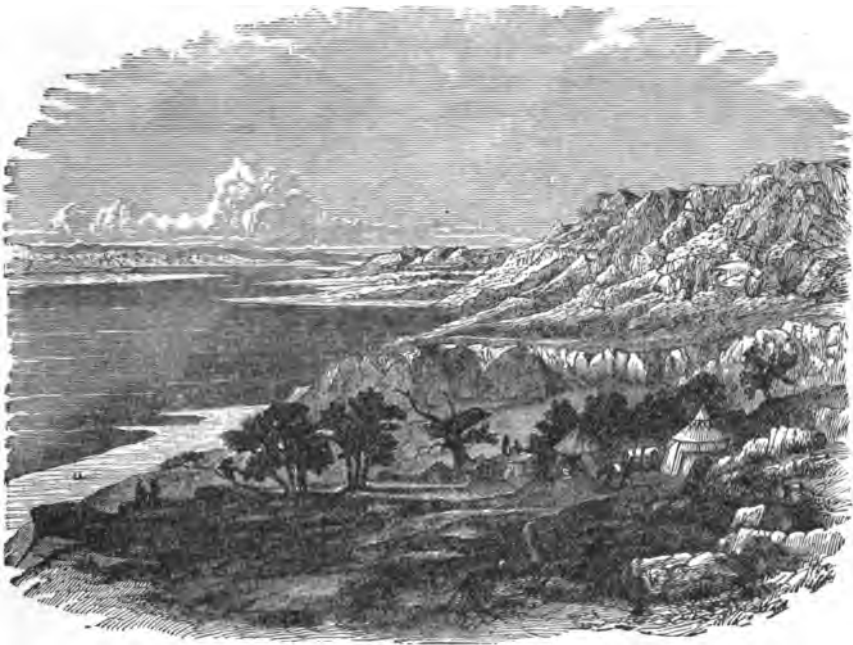
Hodder, in his volume "On Holy Ground," says: "Before us, stretched the long chain of the mountains of Moab, like a huge blue wall, and beneath it lay that great and melancholy marvel, the Dead Sea. It was a view which I had not expected, never having associated the idea of beauty with the Dead Sea, or the wilderness of Judea, but from the height on which we were, the view was very fine.

We noticed as we descended to the plain what so many travelers have observed and described, resembling an exhalation like a white cloud rising from the sea, in exquisite relief with the dark blue hills of Moab behind it.

At length we reached the plain, and making our way through a strange jungle of curious vegetation, we came to the shore of the lake. Here again I was especially disappointed, and looked in vain for the awful gloom and deathliness I had expected to find. The shore was not strewn with masses of dead and whitened trees, the water looked bewitchingly bright and beautiful, and reflected every minute detail of the surroundings, as in a burnished mirror. But this was the first impression. After an hour or so upon its shore I experienced its awful stillness, and felt the absence of life. I cannot define the solitude of the place. There is something which you can *feel* more than you can see.

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\**National Repository* for January. Land of the Hittites, by Joseph Lanking.



The picture above, we think, gives this impression of a mingled beauty and desolation, and we are happy to call attention to it as one of the rare engravings which presents this view.

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#### THE HOLY LAND.\*

Palestine, like Greece, is a country of small extent of territory, and appears especially so, when contrasted with the great events of which it has been the theater. In the north, the country is but some twenty miles wide; in the south, its widest part, it barely stretches to ninety, thus yielding an average breadth of about fifty miles. The southern part of Palestine abounds with hills and valleys. The bed rock is chiefly of limestone, which readily disintegrates into soil. This being upheld by low stone walls, as was once universal, rendered the hills cultivable from base to summit. But, by the decadence of the Jewish nation, desolation and ruin has come upon the land of Judea proper. The most mountainous part is the country about Jerusalem, and between it and the Dead Sea. Cultivation on the hills is most common for about half the distance from Jerusalem to Hebron.

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\**National Repository* or January. Land of the Hittites, by Joseph Lankling.



## RECENT EXPLORATIONS IN GREECE.\*

We take from an exchange the following items as the latest results of Archæological researches in classic Greece. Two societies are actively at work there; one, the "Greek Archæological Society," and the other the "German Archæological Society of Athens."

Several small caves have been discovered in the neighborhood of Naupia. These resembled in form the so-called treasuries at Mykenæ, but were much smaller. Other tombs also have disclosed skeletons, vases, and human images, also resembling those discovered by Dr. Schliemann. The tombs are none of them more than ten feet square or seven high.

The Greek Archæological Society is about to undertake regular excavations in this vicinity, and the opinion is expressed that these excavations are likely to throw light on the early Egyptian settlement of Argolis. The same society has also purchased a large number of houses on the sites of ancient Eleusis and Delphos, in order to commence excavations there. The German Archæological Society has opened an arched rock tomb at Acharnæ. In it were found a large number of articles in gold, silver, bronze, ivory, glass, terra cotta, also similar to those found at Mykenæ. There was discovered neither iron, coins, nor inscriptions—proof that the treasures found in the tombs of Mykenæ belonged to the same age.

Not a single image in clay was found, showing that the rude clay images found at Mykenæ above the treasures, belonged to a later period.

*The Lion of Charoneia.* This noble work of ancient sculpture, far superior to the famous Thorwaldsen lion at Lucerne, has for many years been in fragments, near its pedestal. The Greek Archæological Society is now taking measures to put the fragments together, and to restore the colossal monument to its place.

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 CLEOPATRA'S NEEDLES.†

The remarkable obelisks which have been known to the world under the singular cognomen of Cleopatra's needles, and which are now being removed, one to England and the other to the United States, have a much more interesting archæological interest than is generally supposed.

They were taken from the celebrated quarries at Syene, and were like others, constructed in the usual tapering form symbolizing the sun's rays. The material of which they are composed

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\*From the American Journal of Philology, Vol. I, No. 1.

†Brugsch's Egypt, Appendix.

is a rose colored granite. Pliny states that they were transported to the Nile with the aid of flat bottomed boats, floating in canals especially prepared for that purpose. It is supposed that they were afterwards erected to their place by making a groove at their base, in which they might turn as a hinge, and then building a mound of earth, which increased in size as the top of the shaft arose, until the monument stood erect.

They were originally set up by Thothmes III, one of Egypt's greatest rulers, at Heliopolis, or the City of the Sun, as early as 1600 B. C.

They were transported to Alexandria under Tiberias, and set up in front of Cæsar's temple, where they obtained the name which they bear. The name was given to them because of a tradition that they were removed to Alexandria during the reign of Cleopatra.

The obelisk removed to England is 68 ft. 5 inches high, and contains on its two faces hieroglyphs expressive of the titles of Thothmes III; on the other two Ramses II has added his own, illustrating only the pomp and vainglory of these monarchs, but absolutely destitute of historical information. The other obelisk still standing contains many similar inscriptions, and was erected by the same monarch.

The significance to the Bible student which these remarkable monoliths possess, is not so much in their inscriptions or their form as in the fact that they were probably standing in front of the great temple to the Sun when the Israelites were in Egypt. They also remind us of the two pillars Jochin and Boaz, which Solomon erected in front of his temple. Such obelisks were always erected in pairs, and were the most common and prominent symbols of worship at the east.

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#### A BURIED TEMPLE AND PALACE.

The second Assyrian expedition, which was conducted by Mr. Hormuzd Rassam, brought to light some interesting things. Commencing operations on the mounds of Nineveh, Mr. Rassam succeeded in exploring a site which was regarded as forbidden ground. This was the mound of Nebby Yunus, the supposed tomb of the prophet Jonah. In this mound he discovered remains of places erected by Esarhaddon and Sennacherib. His labors on the mounds of Nineveh have resulted in the recovery of a large number of inscriptions, many of extreme interest. Passing southward, he visited Nimroud, where he continued his labors in the Temple of Venus. This building, which he discovered in his former expedition, was now thoroughly examined, and found to be a large, open temple, con-

taining shrines of several deities. There were also found a number of seats arranged in parallel rows, forming a centre aisle from the chief altar. The plan now recovered seems to favor the idea of its having been a species of forum where religious and other councils were held. The explorations in Assyria have discovered many valuable monuments. Mr. Rassam extended his operations into fields untouched since the time of Sir A. H. Layard's expedition, and he was able to carry out a series of explorations on the mounds of ancient Babylon. Here his discoveries have been most brilliant. In a mound hitherto untouched he discovered a palace of Nebuchadnezzar's, with rich, enamelled columns, beams of Indian wood, and every indication of having been a most splendid edifice. His excavations in the mound of the Birs Nimroud, the site of the supposed Tower of Babel, has proved that the destruction of this great edifice was due, not to lightning or hostile attack, but to a volcanic eruption, which had torn and shattered the edifice.

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#### SYNOPSIS OF ARTICLES IN MAGAZINES.

*The Inspiration of the New Testament.* By PRES'T S. C. BARTLETT. *Princeton Review* for January. Inspiration embraces the facts as well as the thoughts. Whatever the writers affirm to be true, is entirely trustworthy. "We feel prepared to show, *e. g.*, that the narrative of the creation, when taken for what it is, a phenomenal account marvellously compressed, and designed for comprehension in all ages and by all classes, is, when laid by the side of the latest results of science, a matchless *outline* sketch of the very facts of geological history"—no "Semitic tradition," nor "grand poem of creation," but a narrative of the main characteristic facts, in their order and truth."

*The Old Roman Spirit and Religion in Latin Christianity.* By GEORGE P. FISHER, D. D., LL. D. *Princeton Review*, January. Ancient Christianity passed through three consecutive stages. It was first Jewish, then Greek, then Latin. The most conspicuous feature among the influences of the Latin church, which it inherited from old Rome, was the legal spirit. "Almost every one who has knowledge enough of Roman law to appreciate the Roman penal system, the Roman theory of the obligations established by contract, or detect the Roman view of debts, and the modes of incurring, extinguishing and transmitting them or the Roman notion of the continuance of individual existence by universal succession, may be trusted to say whence arose the frame of mind to which the problems of western theology proved so congenial, whence came the phraseology in which these problems were stated, and whence the description of reasoning employed in their solution."—The contrast between Latin and Teutonic christianity is hardly less striking. The ideal of ancient life, Greek as well as Roman, recognized everywhere restraint. The principle of personal independence is ascribed by Guizot and other historians to the Germanic influence. "The old Roman religion was punctilious, formal, ritualistic. The Teutonic mind is spiritual, full of aspirations chafing under the yoke of rules and forms. The ideal spiritual tendency of the German mind appeared in the mysticism of the latter part of the middle ages, which was the soil from which the Reformation sprung."

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\*Quoted from Maine's Ancient Law.

*The Chronology of the Kings of Israel and Judah.* PROF. JOHN WILLIS J. BRECHER, D. D. *Presbyterian Review* for April, 1880. It is the purpose of this article to vindicate the Bible chronology—1. The concurrent narratives which contain these dates are of such a character as to render certain the detection of numerical errors, if they contain any. A very large proportion of them appear in each of the three distinct historical sources, Kings, Chronicles, and Josephus. This evidence is confirmed by the fact that the Old Testament was transmitted in the septuagint and other versions, as well as in the Hebrew. 2. In recording dates, these narratives follow a simple and consistent system. The years of a king's reign are the ecclesiastical years, the fragments of years are also added, the broken year of one king is added to that of his successor. The ordinal and the cardinal numbers are always both to be considered. An analysis of the dates in the light of this system proves their entire trustworthiness. 3. Foreign chronologies confirm the scripture dates. The impression is prevalent that the numerals of the Ptolemaic canon, of Berosus, of the Assyrian canon, and of the other Assyrian records, are discrepant among themselves, and decidedly in conflict with those of the Israelitish records, but the agreement between all these old chronologies is probably closer than the most sanguine antiquarian has dared to claim.

*The Theory of Professor Kuenen.* REV. TALBOT W. CHAMBERS, D. D., LL. D. *Presbyterian Review* for April, 1880. It is, as he frankly states, that the religion of Israel is simply one of the principal religions of the world, nothing less, but also nothing more. Scientific research has shown that the Israelitish religion is only a natural development from beginning to end. The whole story of the Patriarchs he dismisses as mythical, and the first place where he finds the Israelites is Goshen, in Egypt, where they were polytheists. They had developed out of fetichists, having originally worshipped trees and stones. When they arose out of this nature-worship they took a tribal God, whom they called El Shaddai. This God, Moses taught them to recognize as Jahveh, and gave them the "ten words," fragments of which afterwards became the ten commandments. During the Judges the worship of Jahveh continued and spread. The commercial intercourse with surrounding nations set on foot by Solomon did much to improve religion, by elevating the civilization of the people. In the reign of Hezekiah the prophetic party wrote the book of Deuteronomy. During the exile Ezekiel drew up a plan of worship, incorporating with it the ten words and the book of the covenant, giving the whole the form it now has. The theory, however, has no facts to sustain it. It is simply the application of the so-called scientific method or theory to the interpretation of the existing scriptures, and begs the question at the outset by declaring that absolute prediction is impossible, and therefore it must be that everything which surpassed the age, belongs to a later epoch. For eighteen centuries these books have been in the hands of men of different ages and countries, all of whom have regarded them as professing to give a history of revealed religion, but now comes the Leyden professor, maintaining that the volume, so far from being the record of the successive stages of a divine revelation, is an account of the way in which a barbarous tribe originally arose from fetichism to polytheism, and from polytheism to monotheism. The theory is most improbable in the light of history. No parallel instance can be shown where monotheism has grown out of the lowest points of the worship of nature. Polytheism in China and India, and Dualism in Persia never led to monotheism. The Greeks were nearer a monotheistic worship in the early days, when the reign of Saturn or the supremacy of Zeus was recognized, than at a later date, when they filled their Pantheon with Gods many and Lords many. A pure *monotheism* is found nowhere except in the Bible, and in that book it is discovered in the earliest as well as in the latest record.

## EDITORIAL NOTES.

## ARCHÆOLOGY.

## HOW THE PYRAMIDS WERE BUILT.\*

From the far distance you see the giant forms of the pyramids, as if they were regularly crystalized mountains, which the ever-creating nature has called forth from the rock, to lift themselves up towards the vault of Heaven. And yet, they are but tombs, built by the hands of men, which have been the admiration and astonishment alike of the ancient and modern world. Perfectly adjusted to the cardinal points of the horizon, they differ in breadth and height, as is shown by the measurements of the three oldest, as follows: 1. The Pyramid of Khufa, height, 450.75 ft., breadth, 746 ft. 2. Pyramid of Khafra, height, 447.5 ft., breadth, 690.75 ft. 3. Pyramid of Menkara, height, 203 ft., breadth, 352.78 ft. The construction of these enormous masses has long been an insoluble mystery, but later generations have succeeded in solving the problem. According to their ancient usages and customs, the Egyptians, while they still sojourned in health and spirits, were ever mindful to turn their looks to the region where the departing Ra took leave of life, where the door of the grave opened, where the body, well concealed, at length found rest, to rise again to a new existence, after an appointed time of long, long years; while the soul, though bound to the body, was at liberty to leave the grave and return to it during the daytime, in any form it chose. In such a belief, it was the custom betimes to dig the grave in the form of a deep shaft in the rock, and above this eternal dwelling to raise a superstructure of sacrificial chambers, sometimes only a hall, sometimes several apartments, and to adorn them richly with colored writings and painted sculptures, as was becoming to a house of pleasure and joy. The king began his work from his accession. As soon as he mounted the throne, the sovereign gave orders to a nobleman, the master of all the buildings of his land, to plan the work and cut the stone. The kernel of the future edifice was raised on the limestone soil of the desert, in the form of a small pyramid built in steps, of which the well constructed and finished interior formed the king's eternal dwelling, with his stone sarcophagus lying on the rocky floor. Let us suppose that this first building was finished while the Pharaoh still lived in the bright sunlight. A second covering was added, stone by stone, on the outside of the kernel; a third to this second, and to this even a fourth; and the mass of the giant building grew greater the longer the king enjoyed existence. And then, at last, when it became almost impossible to extend the area of the pyramid further, a casing of hard stone, polished like glass, and fitted accurately into the angles of the steps, covered the vast mass of the sepulchre, presenting a gigantic triangle on each of its four faces. More than seventy such pyramids once rose on the margin of the desert, each telling of a king, of whom it was at once the tomb and monument. Had not the greater number of these sepulchres of the Pharaohs been destroyed almost to the foundation, and had the names of the builders of these which still stand been accurately preserved, it would have been easy for the enquirer to prove and make clear by calculation what was originally, and of necessity, the proportion between the masses of the pyramids and the years of the reigns of their respective builders.

## THE EXCAVATIONS AT OLYMPIA.†

It has already been announced by telegraph that the long sought *head of the Victory of Patonios* has been found, unfortunately without the face. It is, nevertheless, a very valuable discovery, of which the following is an account.

\*Extract from Brugsch's Egypt, Vol. I, pages 70-72.

†38th Report, published by the "Monitor of the German Empire." Translated from the French for the Oriental Journal by Prof. Henderson, of Beloit College.

After a necessary interruption during the summer months, the work of excavation was resumed on the 14th of October. We immediately set one hundred laborers to work upon the terrain behind the portico of the Echo, on the east, in order to find the heads still wanting of the east gable, and also that of the Niké (Victory). For in the neighborhood of that portico which borders the Albis on the east, we had already, the year before, discovered two heads, belonging either to the east gable or to the metopes of the Temple of Jupiter, or else to the Roman portrait-statue. Thus we were bound to pursue with energy the works in that direction.

The soil appeared at once very favorable, in the first place, because it was filled with ruins of later structures, made from the debris, and whose clay (torchis) walls have already furnished a large number of our marble fragments, and also because the ancient surface here rises toward the embankment of the Stadion. In the most unfavorable places of the Olympic soil, we have been obliged frequently to dig to a depth of 6 or 7 metres in the sand before reaching a layer which could be excavated to any purpose, while here we met the upper parts of these ruins after having removed only a few inches of the surface soil. Fortunate discoveries here at once promised results of increasing value.

Already, on the 20th October, there was recovered from a wall a small statue of Fortuna-Nemesis, with wheel and rudder, which, as may be inferred from a copy of the same figure discovered earlier, has formerly ornamented, with this attachment, the before-mentioned secret door of the Stadion.

On the 29th followed a *head of Titus*, whose neck corresponds exactly to a statue of Cæsar found a year and a half ago; this was nearly complete, the most beautiful statue of this kind that had yet been found, with its cuirass decorated with Nereids, and with all its vivacity of movement.

The 31st October brought us the head of a kneeling child from the east gable, strengthening our hope of finding yet six heads still wanting to this gable, and of which several, like those of Jupiter, Alpheus, Neppodamia, and Steropea, are of very great importance. This child's head resembles a young brother of Kladeas, but of a more noble form, with eyes beautifully set, and full lips.

In proportion, however, as the embankment of the Stadion arose, so ascended also our excavation. On the 3d November, at noon, the pick of a laborer struck, at about the depth of a spade under the surface, a large piece of marble, which was soon recognized as a head. When it had been cautiously freed from the stones which surrounded it (stones of a wall of more recent construction), it was unfortunately discovered that the face was entirely wanting. But at the first moment we almost forgot this loss, in our joy at having finally in our possession the long-sought head of that Niké whose discovery had brilliantly inaugurated the excavations at Olympia four years ago. That this is really the head of that Victory of Paionios, both the proportions, the quality of the marble, the headdress, the style, and certain minutiae of the surface work, as well as the place itself of the discovery, does not permit us to doubt. Already over a surface of 100 metres from the pedestal of the Niké, we had found fragments of limbs, of drapery, and of wings, belonging to the statue; these were so many indices and guides in the continuation of our researches. Indeed, the neck is so crushed that the head cannot be properly mounted on the trunk, but that it belongs to it, however, the exact harmony of the outlines, and the dimensions of the neck, demonstrate conclusively.

This head differs from the other parts of the statue heretofore found by the preservation of its surface. While the body, in certain places, has been completely roughened by the rain, the rear of the head is relatively well preserved. The probable cause of this is that the head may have been struck off before the body was overturned, the face being severed in the fall, and that afterwards the rear of the head was encased in the wall out of which we recovered it, while the body remained exposed to all the severity of the weather. Moreover it is possible that the layer of color may have helped to preserve the hair and the fillets. But, in any case, what must have contributed to the preservation of this head, is the fact that it was protected on the sides by the erect wings and by an arched

drapery which hung between the wings, as is indicated with the greatest probability by certain fragments of the wings and drapery already found.

In this new discovery, what gives us the purest artistic pleasure is the beautiful contour of the head, around which the hair softly waves, held back by a triple fillet, in order that the air, agitated by the movements of the wings, may not dishevel it. It may be said that this arrangement of the hair is a medium between the elaborate coiffure of the slender young maid embraced by the Centaur in the group of the marriage feast of the Lapithæ, on the west gable, and the graceful ribbons ornamenting those female heads which are found in several museums under the name of Sappho. The head of the Niké has, in common with the former (Lapithean Maid), the severity of motive, and, in common with the latter (the Sapphos), the gracefully waving hair, whose rich tresses flow beneath the bands which clasp them. This demi-reserve (in the ornamentation of the head) indicates its belonging to an epoch near the masters of the severe style; but already in the curling of the hair, is revealed the spirit of the new age, so clearly expressed by the over-bold flight of the Niké, and the exaggerated folds of its drapery.

Though we do not yet possess the most important, that is, the features of its countenance, we need not, however, despair of finding these also. The experiences of the past few years at Olympia teach us that we may calculate with great probability on discovering what is lacking. Dozens of heads have already been recovered here by small fragments. The soil of Olympia has, up to the present, yielded up its works of marble in quantities of which the history of antique excavations perhaps furnishes no parallel. We may, therefore, hope that with perseverance we shall recover not only the face of the Niké and the wanting parts of the Hermes, but also the majority of the metopes and heads of the gables, which are yet lacking. To speak only of these latter groups, when we have already recovered from the soil 41 figures, more or less complete, and 25 heads, we may reasonably hope to find also 15 heads which are yet absent. A succeeding report will show the discoveries that have been made in the other parts of the altis on the west side.

#### THE VENUS OF VIENNE.

The "Venus of Vienne" is known to students of ancient art as an antique dug up at Vienne, which represents, apparently, Venus in a crouching position but without head and arms. M. Felix Ravaisson connects it with figures on Bithynian coins of a crouching Venus, and with a passage in Pliny, which tells of the Bithynian sculptor, Daedalus, who made a "Venus at the Bath." He believes that in this statue we have a copy of the work of this Daedalus.

#### THE ANCIENT PRÆNESTE.

A silver bowl was found at Palestrina, in 1876. It bears a Phœnician inscription. A goddess, symbolized by the face and arms of an Egyptian Divinity, and furnished with wings, is represented as saving a huntsman with his chariot and horses from danger.

The inscription reminds us of the Old Testament's expression of "covering" or "hiding under the shadow of God's wings."

Another reminder, also, of Bible customs is found in the duplicate tariffs of the sacrifices offered in the temple of Baal. These were discovered at Marseilles and Carthage. The animals enumerated as fit for sacrifice are—1. The ox; and—2. The calf and stag; 3. The ram and goat; 4. The lamb, the kid and fawn. The stag was substituted for the human victims once sacrificed by the Carthaginians, reminding us of the ram which was substituted for Isaac in Abraham's sacrifice. In fact, if the Masoretic punctuation were changed in the Hebrew in the passage in Genesis, xxii, 13, the reading would be stag, instead of "ram."

## THE HISTORY OF MONEY.

\*The most rudimentary state of industry is that in which subsistence is gained by hunting wild animals. Accordingly, furs or skins were employed as money in many ancient nations. A passage in the book of Job has been cited as clearly implying that skins passed as money among the early Oriental nations. In the next higher stage of civilization—the pastoral state—sheep and cattle naturally form the most valuable and negotiable kind of property. In the Homeric poems, oxen are distinctly and repeatedly mentioned as the commodity by which other objects were valued. The grandson of Abraham bought land, and paid one hundred pieces of silver for it. The Greek word "pieces," as used in the text, means "lambs." The price paid for the land was one hundred "lambs" of silver. Each of Job's friends, on a certain occasion, brought him an "ear-ring," as well as a lamb, or "piece" of money. The silver was valued by the lambs instead of the lambs by the silver; the lambs, and not the silver, was the standard of value, for silver had not been "monetized." The early Roman coins bear images of cattle and sheep, and were called *pecunia*, money, from *pecus*, a flock of sheep or cattle. Our word "pecuniary" is, of course, derived from the same word. Money was made out of jewels, not jewels out of money. The precious metals have been used as money in three forms, to wit: (1) as jewelry; (2) as money by weight; and (3) as coined money. There can be no doubt that the extreme brightness and beauty of gold and silver fascinated the early races of mankind, and caused the more rich and opulent of them to covet them as trinkets and jewels, long before they were used or conceived of as money. The Egyptian monumental paintings and inscriptions clearly prove that bracelets and rings were the usual forms in which gold and silver ornaments were worn among the earlier tribes and races of men. The transfer of money by weight arose from the unequal size of the rings, bracelets and ornaments, in which the precious metals were originally wrought.

Thus we find Eleazer of Damascus carrying to Rebecca "rings and bracelets of fixed weight." The "shekel" of the ancient Israelites was at first a standard *weight* of gold, silver, or copper, and not a coin as many suppose—the word "shekel" meaning weight in the Hebrew language. In Genesis (xxiii., 16), Abraham is represented as weighing out to Ephron "four hundred shekels of silver," *current money with the merchant*. Aristotle is our authority for the statement that the precious metals were first passed by weight or size. By gradual degrees, however, the ancient Aryan races abandoned the absurd and clumsy custom of weighing their money, and about the year 900 B. C. it seems to have occurred to Pheldon, King of Argos, that a stamp, guaranteeing the quantity and quality of metal, and thus fixing its value in relation to other commodities, would facilitate the transfer of gold and silver as money. That the ingenious Greek ruler fully grasped the idea of issuing coined money is extremely doubtful. Seals were familiarly employed in very early times, as we learn from the Egyptian paintings and the stamped bricks of Nineveh. Being employed to ratify contracts they came to indicate authority; and thus, when a ruler first undertook to certify the weights of pieces of metal, he naturally employed his seal to make the fact known. In a most interesting, as well as exhaustive, work by Mr. Humphreys, it is stated that "the earliest Greek coins were adjusted to some well-known and generally acknowledged weight or standard, and so received the name of *stater*, a Greek word signifying *standard*, and that this standard appears to have been a weight corresponding to two *drachmas* of silver." Although the coins of Argos bore the image of a lion, the early Roman coins were stamped with the rude caricature of a lamb or an ox.

†The progress of coins, from the condition of dumb tokens of barter to that of artistic symbolism and record in metal, is the most marvelous feature in the study of numismatics. The first art met with in coins was at their very invention about B. C. 800. These witness the first steps of artists in their efforts to copy figures of persons or of animals. On one side of such

\*The Californian, January, 1890. Article: What Is Money? By H. N. Clement.

†Numismatic Journal, for October, on the relation of coins to the fine arts.



pieces we find the rude image, the reverse containing only a hollow square employed to hold the metal to the lower part of the die during the process of striking. Gradually, as the image on the reverse becomes disclosed and perfected, the sunken square of the reverse takes form in its turn and presently small objects are found therein. Now the field of the reverse becomes flat, and about the year 400 B. C., noble bas-reliefs, representatives of the Greek art about the time of Phidias Scopas and their cotemporaries, began to appear. The coins of that period are the finest monuments of numismatic art imaginable, and have never been equaled by those of any other people at any period of the world's history. During the long period of the reign of the Roman emperors, we are enabled by their coins to follow the progress of their art with fidelity almost day by day. Now a fatal decadence begins to display itself. The standard and level of art continue to lower until when Christianity first appears on coins, A. D. 312, art is almost at its ebb. At last the Roman coins come down to us covered with meaningless lines, performing a duty which is merely perfunctory.

\*According to Henin there are six grand chronologic epochs of coinage. 1. From the first invention of coinage to the time of Alexander I., 700 B. C., to 454 B. C. This was the rudest epoch of the art. The legends were inscribed in the manner known as *boustrophodon*. 2. From the death of Alexander I to Philip II., 359 B. C. The art attained a very high perfection in Greece. 3. From Philip II. to Augustus Cæsar, 30 B. C. The arts reached their apogee. The *chef d'œuvres* of the skill of the ancients. 4. From Augustus to Hadrian, A. D. 111. The decadence of the art. 5. From Hadrian to Gallienus, A. D. 260. Great decline. 6. From Gallienus to the fall of the Eastern empire, A. D. 1453. The reign of barbarism.

The earliest of the Roman coins were of copper, issued by Servius Tullius, about six centuries before Christ. The coinage of silver, the denarius quinarius and sestertius was begun about B. C. 269.

#### COLLECTIONS OF COINS IN THIS COUNTRY.

There are several valuable collections of coins in this country. A loan exhibition in the Memorial Hall, at Philadelphia, has been described by Mr. Henry Phillips. Another also, the renowned Castellani collection, was on exhibition in the Art Building during the Centennial. In the Castellani collection were many rare coins.

Among these were, first, several *ingots* of copper, representing the first coinage of the Romans, and known in numismatics as *aes rude*. The word comes from the Sanscrit *AYAS*. Roman *AS*, designating unity; unity of weight, a pound, or unity of money, an *AS*. The ingots were always weighed, and they were kept in use among the Romans as late as B. C. 509. Second, a gold coin of Philip II., of Macedon. Laureated head of young Hercules; reverse, charioteer in biga with horses galloping; under them a serpent. Third and fourth, large gold medallions of Honorius and Placidia, struck at Ravenna after the sacking and burning of Rome by Alaric, A. D. 410.

Among the coins on exhibition, in the Memorial Hall, were several Spanish pieces which represent the times when the Carthaginians were forming settlements in Spain, at a period, at least, as early as B. C. 146, and perhaps long preceding that. The face in one coin has some resemblance to Assyrian features, but it is supposed to represent the Carthaginian Hercules. Another specimen is a coin from Corinth, which was issued as early as B. C. 480. It bears a Pegasus on it with the archaic letter  $\varphi$  koph or ancient Phœnician "K," a letter which is only found in those early Greek alphabets, but which has disappeared from the later alphabets. The most remarkable coin is one known as belonging to the so-called "incused" coinage of Magna Græcia. It is a very thin and flat piece bearing the same figure on one side in relief, and on the other intaglio or sunken. It is sup-

\*The proceedings of the American Philosophical Society. Philadelphia, January, 1880. Notes on the collection of coins on exhibition in Memorial Hall, by Henry Phillips, Jr., A. M.

§The report of the American Numismatic and Archæological Society of New York, 1879. Article on some coins of Castellani's collections, by G. Feuardent.

¶The proceedings of the American Philosophical Society. for July and December, 1879, has an article on the collection of coins on exhibition at the Pennsylvania School of Industrial art, in Memorial hall, Philadelphia.

posed to belong to the sixth century B. C. A coin from Tyre, belonging to the era of its maritime prosperity, B. C. 188, represents a rudder, the maritime symbol of the city, and a palm tree, which is supposed to be a religious symbol. Phœnicia is fabled to take its name from this tree, which in Greek is *ΦΟΙΝΙΞ*. The palm tree is supposed by Junian to be a phallic symbol. The palm tree was a symbol also in Solomon's Temple, and is supposed to have been quite wide spread.

The *Numismatic Journal*, for July, 1879, mentions the fact that a Roman architect, M. Stanjeni, has bequeathed to the museum of Rome nine thousand pieces of valuable coins. The rarest pieces are Tartar coins which are very ancient. A farmer in Zurich Canton, Switzerland, while removing some old stone fences in March, 1879, found a collection of Roman coins.

## ETHNOLOGY.

### FOLK-LORE.

\*Folk-lore and mythological literature, old wives' fables! A singular subject to be made a matter of scientific investigation. As a subject for amusement it seems well enough, but that societies should be formed for its especial study seems strange. Sir Walter Scott found much that was curious in demonology and border minstrelsy and folk-lore, and other novelists have delighted in gathering legends and fairy stories, but in these days they are subjected to critical analysis and are studied in the interests of philosophy. Ever since the time when Sir Francis Palgrave called attention to the subject in the *Quarterly Review* and the *Athenæum*, in 1866, the correspondence from every part of the world has increased, and now there is scarcely a tribe, however rude, or a nation, however cultivated, but that has been searched for these mysterious tales. Dr. Edward B. Tylor, Sir John Lubbock and Max Müller have written upon this subject, and it is now regarded as one of the most important branches of anthropology. Not only are primitive customs, such as are connected with marriages, deaths, births, etc., but the inter-tribal relations and primitive political life are illustrated by these fragments of tradition. For comparative mythology, especially, the folk-lore of the ruder tribes is an unfailing source of information. The organization of societies, whose object it is to gather up all that has appeared in print, or to preserve all the tales which may be learned, may be hailed with satisfaction. Such societies exist already in England, in Germany and in India, and we hope that the day is not far distant when some such organization will exist in America. There is especial need that the traditions of the native tribes of this country should be preserved, since the people who possess them are fast losing all traces of them.

### MYTHOLOGY.

†The study of comparative mythology, which is closely connected with Folk-Lore, we are happy to notice, is about to take a new departure. It is no longer a mere subject for amusement, or one by which the display of great learning could be made, but one to which much critical and historical investigation has been given. We are happy to call attention to the work done in this line, especially by Prof. R. B. Anderson, in Scandinavian, and to that of H. H. Bancroft, in the North American mythology.

There are few persons who have realized what wonderful beauty there is stored away in this hidden realm of thought, nor how much of history can be traced in this line.

Professor Anderson has referred to the resemblance of the Odinic myths to certain facts in Bible history, as well as to certain features of classic mythology. But he has ascribed this resemblance to a common origin, the different branches of Indo-Germanic or Aryan race having transmitted them from their primitive home in the East. The same resemblance, however, can be seen between the North American traditions and the same facts of Scripture, and in some cases even to classic mythology. These latter resemblances, many authors have been inclined to ascribe to the unconscious act of the missionaries and other persons who have gathered these traditions, the strange blending of Christian and Pagan ideas arising from the

\*Antiquary, January, 1880.

†The Younger Edda. Chicago, 1880. Native Races of the Pacific States, Vol. III.

medium through which these traditions have been transmitted. But if this is so in America, and it is denied that the resemblances prove any historical connection between American traditions and primitive and classic tales, then the same reasoning might be applied, to a certain degree, to the Scandinavian myths. On the contrary, if the resemblances in the Scandinavian mythology are due to the fact that these stories were so well known in the earliest days of history before the different branches of the Aryan race separated, then we may suppose that the resemblance in the American mythology may be due to the fact also that these same stories were known to the ancestors of Turanian stock before they separated from the Aryan. There is this difference, to be sure, that the Turanian and the Aryan languages do not belong to the same stock and, therefore, the traditions cannot be traced in the direction of language, and it seems almost impossible that memory should transmit through so long a period, stories which belong to our first ancestors.

#### ART AND ARCHITECTURE.

**ETRUSCAN VASES.**—The Museum of the Louvre, Paris, has just acquired two vases of large size, of the utmost importance from the scientific point of view. They are two Etruscan vases of the earliest period, with paintings in white on a red ground. On one is seen a chariot attacked by a lion, an imitation of Assyrian art, and a naval engagement between two very singularly shaped vessels.

**THE FRESCO OF FRA ANGELICO.** The recent removal of the magnificent fresco painting of Fra Angelico from what was the chapter house of the convent of St. Dominic, is an event in the history of art. It is well known that the frescoes of this artist are among the earliest works of mediæval art in existence. This, however, in common with other frescoes of great value, has been, owing to the carelessness of Italians, exposed to the danger of destruction. The passion for restoration also threatened to almost obliterate the original. This picture has been washed, as were the frescoes of Michael Angelo on the Sistine chapel. The sky has been injured, and the robe of the virgin has also suffered. When the ancient building was being converted into a villa, the masons cracked the brick walls on which it was painted. Fortunately, Professor Maggariti has recently purchased the painting, and has succeeded in removing the partition bodily, without injuring the painting. The probability is that this gem of mediæval art will now be preserved, and that it will remain very much as it has appeared under the hand of the great artist.\*

**HOUSES IN INDIA.**—A large square building with an open court in the center, and generally three stories in height. A veranda runs all around each story, opening into the court. Some houses have two parts, one back of the other, both containing courts. The part nearest to the street, in that case, is the one used by the men, the women rarely being permitted to enter it. In the back part the doors and windows of the women's rooms open into the verandas. The women may go into the court, and may visit each others' rooms, but cannot go anywhere else. The houses are built of brick, plastered over and whitewashed. The stores are of brick, roughly put together. The courts are sometimes paved, sometimes of mud, but always destitute of grass. All the rooms of the first story are used for cooking, or else as stables for cows. Their implements are the most primitive. The floors are of mud, and their fire places are like three pillars on which they rest the kettle, and between which they put the wood for burning. They have no chimneys, and the smoke wanders through the room. The rooms where the women live are mere bed-rooms, paved with brick, with one window without glass, but having bars running up and down. The rooms have no carpet nor matting, and no pictures. The furniture is a bed with a piece of matting on it, a wooden box to keep clothes in, and a brass drinking vessel. In this room the mother and the children stay the most of the time.†

\*Harriett G. Brittain, *Congregationalist*, April 19.

†National Repository, February, 1880.

## GEOGRAPHICAL EXPLORATIONS.

Rev. Dr. Sayce has expressed his assent to the theory which Brugsch-Bey has propounded—that the passage of the Israelites was across the Sir-bornian Bog, near Suez, rather than across the Arabian Gulf.

Prof. James Bryce has ascended to the top of Mt. Ararat, in Armenia, and given an interesting account of his adventures. He calls the Armenian race the most hopeful and vigorous race in the east.

Mr. C. Doughty visited the so-called rock city of El Heggi, beyond Damascus, one of the seven fabled cities of the Arabs, which, in the days of Ptolemy, was an emporium for frankincense and gold.

Dr. Bastian, Pres't of the Berlin Geographical Society, has made an ethnological tour through Persia, Assam, the Penang Islands, and Java.

The British expedition to Afghanistan has added to our geographical knowledge of that region.

Mr. Ernest Oppert has written a narrative of three visits to Corea, which is very interesting.

Mr. C. F. Ferriett has made valuable ethnological researches on the Indo-Chinese peninsula.

A new route has been discovered from the Caspian to the Sea of Aral, the principal part of it by water, and shorter by one-half than the previous route by the way of Orenburg.

The Russian surveys in central and northern Asia are revealing some important facts. The great river Oxus has been found navigable for above 1000 miles, and the watershed between the Obi and Yenesei has been surveyed, and the feasibility of uniting them has been established.

Rev. J. McCarthy has penetrated through China to Bhomo in Burmah, and has given a very interesting account of his journey, and of his visit to the cities in the interior of China.

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 PROCEEDINGS OF HISTORICAL AND ARCHÆOLOGICAL SOCIETIES.

*Historical Society of Chicago.* Hon. Isaac N. Arnold, President; Albert D. Hager, Sec. and Librarian. Papers read since Jan. 1, 1880. "Gen. Benedict Arnold before his Treason," by Hon. H. C. Van Shaack, of ~~Manlius~~, N. Y. "Chicago, and the Sources of Past and Future Growth," by Hon. Wm. Bross. "Strategy of the American Revolution," by Col. Henry B. Covington. "Recollections of Early Illinois and her Noted Men," by Hon. Joseph Gillespie. A paper was also read Dec. 1, 1879, by Edward G. Mason, Esq., upon Kaskaskia and its Parish Records. Two hundred and thirty-nine bound volumes and 555 unbound added to the library, which numbers 17000 volumes; also 18 volumes of manuscripts from the estate of Capt. W. H. Swift. Relics from the Holy Land, Egypt and Peru, marble from Solomon's temple, bronze symbols from Cyprus, two Peruvian idols in bronze. Mrs. Lucretia Pond, of Petersham, Mass., has donated eight lots in the city of Chicago, valued at \$112.00. An addition to the building is soon to be made, to cost \$5,500.

*The Licking County Pioneer Historical and Antiquarian Society, Newark, Ohio.* Isaac Smucker, Secretary. Papers read in 1879: A description of the "Old Fort," printed in *Newark American* and in *Newark Banner*. Flint Ridge, its Geography, Topography, Geology, Palæontology, etc. Printed also in *Newark American*. "Cresap and Logan" will be published in *Ohio Statistics*. "Crawford Sandusky Campaign in 1782," ditto. History of the Society, published in *Newark American*. "The Pioneers of Licking County," a poem, by A. B. Clark, ditto. Four hundred articles added to the cabinet, including ancient coins, relics, fossils, implements and ornaments.

*American Numismatic and Archæological Society, New York.* Charles E. Anthony, LL. D., President. Richard A. Lawrence, Curator. Annual meeting March 18, 1879. Papers read in 1879: 1. On some Frank sepulchres of the sixth, seventh and eighth centuries, by Mr. E. Demorgan. 2. The Mas-culo Feminine Ænauirgos of the Egyptians, by Mr. G. L. Feuardent, published in the proceedings. 3. Notes on the Collection of Coins and Medals in Memorial Hall, by Henry Phillips, Junior. 4. The Philosophy of Christianity, by Pliny E. Chase, LL. D. The Philosophy of the Biblical Account of Creation. Additional notes upon the collection of coins and medals.

*Western Reserve Historical Society.* Col. C. Whittlesey, Pres't. Tract No. 50, Ohio Indians, by Judge Hugh Welch. No. 51, The War of 1812: Gen. Wadsworth's Division of Ohio Militia, by Col. C. Whittlesey.

*New Hampshire Historical Society.* Sam'l C. Eastman, Librarian. On the origin and use of the name Kearsage, as applied to two mountain peaks in N. H. By John M. Shirley and Hon. C. V. Fox.

*New Jersey Historical Society.* Rob't S. Swords, Librarian. 1. The Bones of Columbus, by Col. R. S. Swords, at the annual meeting at Trenton, N. J., Jan. 23, 1879. 2. Massacre at Tappan, in September, 1773, by Gen. Wm. Stryker. 3. A Memoir of Prof. Joseph Henry, LL. D., by Prof. James C. Moffat. At the May meeting in 1879: 1. Character and Employments of the Early Settlers on the Sea Coast of New Jersey, by Rev. Allen Brown. 2. The Newark Mountains in the Last Century, by Stephen Wicks, M. D.

## INDEX OF ARTICLES ON ARCHÆOLOGY, ANTHROPOLOGY AND ETHNOLOGY,

Which have appeared in American and English Periodicals during 1879.

COMPILED BY CHAS. H. S. DAVIS, MERIDEN, CONN.

- Aborigines of Victoria, the Intellectual Status of the. (Spectator. (Littell's Living Age, April 26. 3 pp. Were originally alike, and all speak dialects of one tongue, but seem stricken with perpetual childhood. Before Europeans landed had discovered fire and the use of pottery. The race is perishing very fast.
- Anthropological Societies and Instructions in Anthropology, Report on. Dr. Thulle. (Revue d'Anthropologie). Kansas City Review, Feb. 3 pp. Account of the various societies for the study of Anthropology since 1800.
- Antiquity of Man. Rev. L. J. Templin. Kansas City Review, June. 7 pp. Describes Ancient Remains in America and Europe.
- Antiquity of Man, Another View of the. B. F. Mudge, Kansas City Review, Aug. 2 pp. A reply to Rev. L. J. Templin.
- Antiquities in the Territory of Sybaris, Excavations and Discoveries of. J. Barnabeis. London Academy, July 19. Some tombs opened, containing a few coins, some thin gold plates containing traces of Greek writing, supposed to be mystic matter written by one initiated in the Eleusinian mysteries.
- Antiquarian Remains found in a Mound and in the Brahmapuri Hill, near Kolhapur, Memoranda on same. R. J. Bhandarkar, Jour. of Bombay Branch of Royal Asiatic Soc., No. 36.
- Arbor Low and other Circles of Stone. Mr. Goss. Reliquary, July.
- Archæological Explorations in Tennessee. F. W. Putnam. Kansas City Review, June, 12 pp.; July, 9 pp.; Aug., 9 pp.
- Archæological Notes from Italy. J. Barnabei. London Academy, Aug. 30. Discoveries at Oviato, Olmeneta, Pieve Quinta, etc., of coins, bronzes, etc.
- Archaic Solar Cult of Egypt. R. Brown, Jr. Theological Review, Jan.
- Assyria and Babylon, Recent Discoveries in. Builder, Aug. 2.
- Assyrian Explorations, W. St. C. Boscamen. (Athenæum.) Century, Aug. 9. Explorations under the auspices of the British Museum, made at Nineveh, Calah, Assur, Babylon, etc. The excavations on the Mujelib mound have proved that this was the site of the famous hanging gardens.
- Assyrian Finds, Fresh. B. H. Cooper. (Sunday Mag.) Methodist Protestant Mag., June. 8 pp. Also condensed in the Oriental and Biblical Journal, vol. 1, No. 1, 1880.
- Atlantis not a Myth. E. H. Thompson. Popular Science Monthly, Oct. 5 pp. Endeavors to trace the Copper Mines of Lake Superior, and the builders of the ancient cities in Central and South America, to the island of Atlanta, and gives the various theories and traditions in regard to that island.

**Aztecs, Backgammon among the.** E. B. Tylor. (*Macmillan's Mag.*) *Eclectic Mag.*, February. 7 pp. *Popular Science Monthly*, February. 10 pp. Describes the game as played by the Romans. Greeks and other nations, and concludes that the game came direct from Asia to America, reaching Mexico from the Pacific coast.

**Barbarians and Chauseen, History of the South Western.** Translated from the "Tseen Hau Skoo," No. 95. A. Wylie, *Journal of Anthropological Institute*, XXVIII.

**Bounabarrhi, The Ancient Remains at.** W. Simpson. *London Academy*, Nov. 1. Answer to Prof. Sayce, who claimed that marks of a pick on the stones proved their Hellenic character.

**Cuneiform Archæology, The Study of.** Rev. B. W. Savile. *Clergymen's Magazine*, November. 16 pp. Account of two great libraries at Nineveh and Babylon twenty-five centuries ago. Evidences which cuneiform inscriptions of the Assyrian and Babylonian monuments afford of the truth and accuracy of the Bible.

**Cyprus, Rough Notes on Prehistoric.** H. C. Rawlinson. *Monthly Record of Geography*. February.

**Dighton Rock Inscription, The.** C. Rau. *Magazine of American History*. April. 3 pp. Letter from J. J. A. Worsaae, of Copenhagen, concerning the removal of the Dighton Rock to Denmark, and the erection of a statue of a Northman in place of the rock.

**Egyptian Archæology, The Study of.** Rev. B. W. Savile. *Clergyman's Magazine*, October. 13 pp. Egyptology as gathered from the hieroglyphic monuments and papyri, affords no insignificant proof of the historical truth of the Old Testament. Examples shown from late discoveries.

**Engineering, Some Features of Ancient.** *London Builder*, Aug. 2. 2 pp. *American Architect*, Aug. 9. Canals, artificial harbors, stone bridges, aqueducts, drainage systems, etc., existed 4,000 years ago, as well as now. Describes various engineering feats of ancient civilization.

**Ethnological Excursions in the Malay Peninsula.** M. von M. Maclay. *Journal of Straits Branch of Royal Asiatic Society*, No. 2.

**Ethnological Notes on the Motu, Koitapu and Kolari Tribes of New Guinea.** Rev. W. G. Lawes. *Journal of Anthropological Institute*, XXVII.

**Evolutions of New Varieties of Men, Some American Illustrations of the.** Dr. D. Wilson. *Journal of Anthropological Institute*, XXVII.

**Flint Implements by the Aborigines and Prehistoric Inhabitants of America, Curious Discoveries in regard to the manner of making.** (*Scientific American*.) *Engineering and Mining Journal*. August 9. Illustrated. Remarks of Mr. F. H. Cushing at a meeting of the Anthropological Society, at the Smithsonian Institution. How the aborigines manufactured pottery, stone axes and flint arrow-heads. The study of arrow-making establishes the groundlessness of all archæological classifications of chipped articles, based on diversity of form alone.

**Games, A History of.** E. B. Tylor. (*Fortnightly Review*.) *Eclectic Magazine*, July. Gives accounts of different games in use by the Kalmuks, Maoris, Egyptians, Persians, etc., and traces their connection with the games of the present day, as chess, backgammon, polo, dice, checkers, fox-and-geese, etc.

**Gaul and Britain, Monuments of.** B. Shipp. *Louisville Magazine*, October. 9 pp. Accounts of the Gallic stones in various parts of Great Britain. Thinks that ages before the first known inhabitants, other peoples inhabited these regions, and transmitted their religious ideas and ceremonies to those who succeeded them.

**Gun Flints and Neolithic Art.** (*English Mechanic*.) *Saturday Magazine*, August 23.

**Human Family, The Primitive.** C. S. Wake. *Journal of Anthropological Institute*, XXVIII.

- Human Race Begin?** When Did the. W. W. Kinsley. Penn Monthly. September, 16 pp.; October, 9 pp. Description of Ancient Remains in Great Britain, Denmark, Egypt, India, Peru, etc.; different theories in regard to the flood, and shows that while many widely different nations witness to the confusion in which the subject of the beginning of the human race is yet involved, yet they also show some reconciliation possible, and encourage Christians to still hold firm to their confidence, and with patience wait.
- Indian Metaphors and Myths, The Westward Spread of some.** Indian Anti-quary, June.
- Inter-Oceanic Races of Men, A Revised Nomenclature of the.** Rev. S. J. Whitmee. Journal of Anthropological Institute, XXVII.
- Lake-Dwellings of Switzerland, The Ancient.** Boston Journal of Chemistry, January. Account of Discoveries at Lake Neuchâtel.
- Lake Village, A Buried.** (Spectator.) Century, July 12. Account of Discoveries at Seeberg, Canton Berne, of bone, flint hatchets, bronze needles, pottery, and animal remains. Historically and archæologically one of the most interesting localities in all Switzerland.
- Lost Race of America, Notes on a.** Lieut. A. W. Vogeler. American Naturalist, January. 3 pp. Origin of the Indians of Western Florida, as traced in the shell mounds. Habits, ceremonies and manner of interment of this lost race are parallel with those of the ancient Danes.
- Man, Early Traces of.** G. De Mortillet. (Revue d'Anthropologie.) Popular Science Monthly, April. 5 pp. Works plentifully scattered throughout France, England, Spain and Italy. The earliest quarternary epoch is characterized, so far as man's works are concerned, by a stone implement of peculiar form, found in abundance in France, England, Spain, and in the valley of the Delaware, near Trenton, N. J. Found also in Egypt. During the middle tertiary there existed a creature, precursor of man, which was acquainted with fire, and could make use of it for splitting flints.
- Marriage, Recent Investigations into Archaic Forms of.** Calcutta Rev., Jan.
- Mediæval Workmen's Tools, On.** J. L'Estrange. Norfolk Antiquarian Miscellany.
- Mounds, Ancient Artificial.** B. Shipp. Louisville Magazine, January. 7 pp. Refers to the Mounds of Europe and Asia, as described by ancient and modern writers.
- Mound Builders? Were they.** S. L. Frey. American Naturalist, October. 7 pp. Describes the contents of some graves, and considers the question whether the Mound Builders extended their occupation as far east as Eastern New York.
- Mounds of the Island of Marajo, Brazil, The Artificial.** O. A. Derby. American Naturalist, April. 5 pp. The work of man, of an exceedingly industrious race, and intended as works of defence, as dwelling places, and as cemeteries for the dead. Pottery found in great abundance, with the rudiments of art.
- Mounds in Kansas, Prehistoric.** Kansas City Review, January. Describes a mound near Junction City, Davis County, Kansas.
- Mounds Simulating Animal Forms, Ancient.** Dr. Phenné. London Builder, Oct. 4. Paper read before the International Congress of Americanists, Brussels. Refers to mounds in America and China.
- Olympia, Excavations in.** London Builder, July 5. By the German government, bringing to light three heads and three torsos in marble, besides many important inscriptions.
- Palæolithic Implements from the Valley of the Lea.** W. G. Smith. Journal of Anthropological Institute, XXVI.
- Palæolithic Man a Reality of the Past or a Myth of the Present?** By N. Whitley. Journal of Psychological Medicine, April.
- Patolli in Ancient Mexico, and its probable Asiatic Origin, The Game of.** E. B. Tylor. Journal of Anthropological Institute, XXIV.

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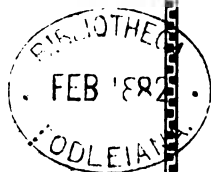


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## TABLE OF CONTENTS.

ACCADIAN OR SUMERIAN? By Rev. O. D. Miller.  
NOTES ON THE CONFUSION OF TONGUES IN THE LIGHT OF MODERN LEARNING. By Rev. W. S. Hawks.  
INFLUENCE OF THE ABORIGINAL TRIBES UPON THE ARYAN SPEECH OF INDIA. By Prof. John Avery.  
GENESIS AND ABIIGENESIS. By M. C. Read.  
THE DISCOVERIES AT NINEVEH. By W. W. TAYLOR.  
THE GAN-EDEN OF GENESIS. By Rev. O. D. Miller.  
BUDDHA'S FIRST SERMON.  
EDITORIAL NOTES:—  
Buddhism and Christianity.—Grimm's Law.—Ancient Armor.  
ARCHAEOLOGY AND ETHNOLOGY.—Museums. A Beautiful Epigram of the Emperor Augustus. The Northman and the Early Condition of Society in Europe. The Eddas.  
OUR EXCHANGES  
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## ACCADIAN OR SUMERIAN?

BY REV. O. D. MILLER.

Mr. Geo. Smith, in his very valuable paper on the "Early History of Babylonia," remarked that:

"When the light of monumental history dawns upon Babylonia, we find that country inhabited by two races, the Sumir and the Akkad; they spoke two different languages, one Turanian, the other Semitic; but we have no information as to which race spoke either language."<sup>1</sup>

So far as concerns any clear, demonstrative evidence, the concluding statement of the foregoing extract was strictly correct; nevertheless, there existed certain indications sufficient to give rise to the general opinion, among cuneiform scholars, that the *Akkadi* were the real Turanians of Babylonia, the *Sumeri* being regarded as Semites. But a few years since, Dr. Jules Oppert, discarding his former impressions, came out with the announcement that the Sumeri were the actual Turanians, the Akkadi the Semites; thus reversing the prevailing theory among Assyriologists. A long discussion followed in France, conducted chiefly by Dr. Oppert and Prof. F. Lenormant, who maintained the former hypothesis. Subsequently, the question was taken up by the Assyriologists of other countries, and the result is to-day that the opinions of cuneiform scholars are divided as to which element of population, the Akkadi or the Sumeri, were the actual Turanians, speaking the language which appears in the bilingual texts, side by side with the Semitic Assyrian or Babylonian.

Although this is, in one sense, a simple question of *names*, it involves, nevertheless, an important point in ethnology, and the matter of uniformity among Assyriologists in the use of technical terms, is another important consideration. The aim of the present paper will be to reaffirm the old hypothesis, which regards the Akkadi as the real Turanians of the country of the Euphrates.

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1. Trs. Soc. Bib. Arch., London, I, p. 29.

In point of fact, the question here proposed turns, to a great extent, upon the proper interpretation of certain phrases, habitually employed by the Assyrian monarchs in the colophons attached to the bilingual and sometimes to the unilingual inscriptions. For convenience of reference, we place here, under the eye, a few examples of these phrases, in the Assyrian transcription:

*First. Kî pi duppi u alali labiri gabri Assur u Akkad.*<sup>2</sup>

*Second. Kî pi duppi u izlihutsi labiri gabri Assur Sumir u Akkad.*<sup>3</sup>

*Third. Kî pi izlihutsi duppu gabri Babilî.*<sup>4</sup>

*Fourth. Gabri Assur.*<sup>5</sup>

The main point of inquiry in all these phrases regards the origin of the term *gabri*, and the sense to be attached to it as here employed. Dr. Oppert considers it as purely Semitic in its origin, being radically connected with the Assyrian *gab-ru*; and he translates it by "masters."<sup>6</sup> The phrase, then, *gabri Assur u Akkad*, he would render: "The masters of Assyria and Accad." At first Prof. Lenormant distinctly favored this interpretation, rendering the same phrase, "The heroes of Assyria and Accad."<sup>7</sup> But Drs. Schrader and Delitzsch regard the term *gabri* as purely Accadian in its origin, having no direct affinity with the Assyrian *gabru*; but they seem to think that *gabri* had been adopted by the Assyrians as a loan word.<sup>8</sup> Subsequently, also, Prof. Lenormant, in a very fine study upon the Accadian radical *gab*, clearly established, in our view, the Accadian formation of *gabri*, giving to it the sense of "equals," "rivals," which was that previously adopted by Drs. Schrader and Delitzsch, before cited.<sup>9</sup> The strict equivalence of the Accadian radical *gab* and the Assyrian *mahar*, "face, front," of the Accadian *gabri*, also; and the Assyrian *mahiri*, *maharu*, "equal, rival," is most fully illustrated in the various examples cited by Mr. Norris.<sup>10</sup> But Mr. Fox Talbot has best defined the use of *gabri*, in the colophons before mentioned, as follows:

"*Gabri* is a frequent word, and generally means rivals, equals, or things *parallel* or *comparable* to one another. Applied to tablets, it appears to be the name which they gave to their *bilingual* tablets, in which the two languages *alternate* in successive lines (or opposed columns), which, therefore, are *parallel* to each other, or stand side by side."<sup>11</sup>

2. 2 R. Pl. 36, No. 1, Rev. 1, 11, 12.—NOTE.—We adopt this mode of citing the British Museum Series of Cuneiform Texts, vols. 1-4, Folio.

3. 3 R. Pl. 55. No. 2, l. 12, Cf. 2 R. Pl. 42, No. 3, Rev. 1, 22-24.

4. 3 R. Pl. 64, Col. 2, l. 32.

5. 2 R. Pl. 10, Col. 1, l. 25.

6. Journal Asiatique, Feb.-April, 1875, pp. 281, 282.

7. Etude's Accadiennes, T. I. pt. 3, pp. 63, 66.

8. See Delitzsch Assyrische Studien, Heft. I, p. 4, note. Cf., pp. 120-122.

9. For Lenormant's Study, see Journ. Asiatiq., Feb.-March, 1877, pp. 235-254.

10. See Assyrian Dictionary, i, pp. 159-164; iii, pp. 772-3-8.

11. Trs. So. Bib. Arch., iii, p. 432.

Rev. A. H. Sayce seems to entertain the same opinion respecting this term; and it is sufficiently confirmed by M. Lenormant and Dr. Delitzsch before cited.<sup>12</sup> We are now prepared to render the phrases heretofore presented in the Assyrian transcription:

*First.* "According to the ancient tablets and papyri, in parallel columns, of Assyria and Accad."

*Second.* "According to the ancient tablets and papyri, in parallel columns, of Assyria, Sumir and Accad."

*Third.* "According to the manuscript tablet, in parallel columns, of Babylon."

*Fourth.* "The parallel columns of Assyria."

It will be seen that in the third and fourth phrases, only one country is named, and, in certain cases, the inscription itself is found to be unilingual. Dr. Oppert has based a very strong objection, upon these facts, to the rendering of *gabri* by "parallel columns." It is probable, however, that this phraseology had become fixed and technical, being applied alike to bilingual and unilingual copies from the ancient texts.

But what, now, is the argument, admitting the sense of "equals, rivals," or "parallel columns," for the term *gabri*, as it occurs in these phrases cited? It is, simply, as in the first phrase, that Assur and Akkad are here placed in contrast, and so the languages appertaining respectively to them; so that, if the column of Assur is Semitic, that of Akkad must be non-Semitic; that is, Turanian. It will be seen from this why, on one hand, Dr. Oppert maintains for *gabri* the sense of "masters" simply, and, on the other, would attach to the names Assur and Akkad, as they occur in these phrases, an exclusive geographical import, instead of an ethnological or linguistic sense. But that *gabri* takes often the sense of "equals, rivals," "things comparable or parallel," admits of no doubt. It has been, in fact, most fully demonstrated by the authors named; moreover, it is obvious that the names Assur and Akkad, in the phrases cited, are not used exclusively in the geographical sense; they take here a palpable linguistic import. The result is, that the language of Akkad is here placed in contrast with that of Assur, which, being known to be Semitic, that of Akkad must be regarded as non-Semitic, or Turanian.

We pass now to another point involved in the question before us, equally important in its bearings. It is a fact sufficiently apparent from the texts, that the name *Sumir* was primitively applied to the original Assur, modern *Kala Chergat*, the first capital of Assyria; and that, subsequently, this name *Sumir*, thus applied, was actually supplanted by that of Assur, as in the first phrase before cited from the colophons. This original ap

12. For Rev. Sayce's views, see *Assyrian Lectures*, p. 17, note 1.



plication of the name Sumir, instead of being doubted, is expressly maintained by Dr. Oppert, as in the following extracts:

"The word *Sumir* is no other than the Turanian name itself of the country of Assyria. This name appertained to a limited region, and was extended to the whole country, the same as took place with Assur. The Semitic name *Assur* supplanted the Turanian name *Sumir*, which explains the disappearance of the latter." *Lib-zu* and *Mak-zu* mean the same and designate the city of *Sumir*, or *Assur*, to-day *Kala Cherghat*." "We have insisted upon these points to show the cause of the disappearance of the name *Sumir*, replaced at a later period, in the geographical point of view, by the name of *Assur*. This was the appellation of the region *North* of Mesopotamia, before the arrival of the Semitic Assyrians, coming from the *South*, from the country of Akkad."<sup>13</sup>

In our view, the facts here stated are most unfavorable in their import for the Sumirian hypothesis. In the first place the name *Sumir* appears to be Semitic instead of Turanian. It is so considered by Mr. Smith,<sup>14</sup> and in a bilingual text the name *Ma-zu*, in the Turanian column, is equated to *Sumir* in the Assyrian column, where all the other names are obviously Semitic.<sup>15</sup> Again, while Dr. Oppert admits the application of Sumir to Assyria, in the geographical sense, he holds, at the same time, that it had a linguistic import, although referring to the Turanian language; he observes: "The word *Sumir* was equivalent, then, for the Assyrians, to the idea of a sacred language."<sup>16</sup> The theory of the author seems to be that, primitively, the Sumir, as Turanians, occupied and gave this name to the country, afterwards known as Assur, or Assyria. Subsequently, the Semitic Assyrians conquered the country and imposed their language upon the people. All this is, to say the least, quite problematical, and it affords no sufficient basis for a scientific nomenclature. Nor is it at all probable that the Assyrians ever regarded the language of a subjugated people as a "sacred language," in distinction from their own. If the name *Sumir* was equivalent to Assur or Assyria, in the geographical sense, it is far more reasonable to believe that it was such, also, in the ethnological and linguistic sense. The facts here tend strongly, as it seems to us, to the support of the former, Accadian hypothesis.

There is still another point to be considered in connection with our subject, and, in our view, it is the most important of all. In the titles assumed by the Turanian Kings of Chaldæa, during the earliest period and dynasty, headed by Lik-Bagas,

13. Journ. Asiatiq., Feb.-Apr., 1875, pp. 272, 284, 287, 288. For the equivalence of the names *Lib-zu* and *Ma-zu* and *Sumir*, see Lenormant, *Etude's Accad.*, i, pt. 3, pp. 87-89.

14. Tra. So. Bib. Arch., i, p. 89.

15. See *Etude's Accad.*, i, pt. 3, pp. 88-89.

16. Journ. Asiatiq., Feb.-Apr., 1875, p. 283.

or Uruk, we have the constantly recurring phrase: *Ungal Ki-en-gi Ki Akkad*; and Dr. Oppert renders it: "King of the Sumir and Akkad;" a translation which is supported by Mr. Smith and the majority, perhaps, of cuneiform scholars. Such being the case, Dr. Oppert urges with great force that, since these early kings were unquestionably Turanians, they would naturally place the name of their own race, language and country first in the titles assumed; and as that of *Ki-en-gi* always occurs first, this must have been the name of the Turanians themselves, as well as of their language and country. It is this consideration, in part, as it would seem which has inclined Dr. Delitzsch to the Sumerian theory, although at first, he favored decidedly the Accadian. Until quite recently, in fact, we were inclined to the supposition that *Ki-en-gi* was really the designation of the Sumerian population and country. But Rev. Sayce observed not long since: "I am still unconvinced that *Kiengi Accad*, in the imperial title, is not to be read *land of Accad*," and it was this statement, from so eminent an authority, that prompted us to a renewed investigation of this particular matter. M. Lenormant has maintained, during the entire discussion, that *Kiengi* is not the name of a particular country, like that of Sumir, but merely an expression for "country" in general; thus, instead of: "King of the Sumir and Akkad," he would render this phrase: "King of the *country* of Akkad." We have, for example, the bilingual phrase in which *Ki-in-gi* is equated to the Assyrian *ma-tuv*, "country;" that is, country in general. It is obvious that *Ki-in-gi* here is only a variant of *Ki-en-gi*; and Dr. Oppert is inclined to admit it as such. In such case, *Ki-en-gi Akkad-ki*, or *Ki-Akkad*, even, plainly admits of the construction: "the country of Akkad." But, in our view, on a renewed investigation, the texts absolutely enforce this construction. We quote here from a bilingual, or trilingual, list of names of countries, according to Mr. Smith's reading and rendering:

1. *Ir sa ki—alu sa Irzitu*—"Cities of the earth."
2. *Ir sa ka-me-ki—alu sa Sumir*—"Cities of Sumir."
3. *Ir sa Ur-ki—alu sa Akkad*—"Cities of Akkad."
4. *Ir sa ki-in-gi ki Ur-ki—Alu sa Sumir and Akkad*—"Cities of Sumir and Akkad."<sup>17</sup>

It is to be remarked that, according to the values of the characters, *ka-me-ki*, in the second line, should be *ka-mi-ki*; *ki-in-gi*, in the fourth line, should be *ki-en-gi*, the same as occurs uniformly in the imperial titles. We have, then, *ki-en-gi ki-Akkad-ki*, usually rendered "Sumir and Akkad." But, is this correct? Is it possible, in fact, according to the uniform usage in

17. 4 R. Pl. 39, No. 1, Obos. l. 34-36. Cf. Trs. Bib. Arch., p. 88, Nos. 69-72.

the texts? There is here a regular bilingual (or trilingual) equation of geographical names; and, according to the foregoing versions, two distinct names (Sumir and Akkad), applicable to two different countries, are placed on the *same line and in a single bilingual phrase*. We venture the opinion that not another example of this kind can be produced, from the entire body of inscriptions at present known. If two different names, applicable to two different countries, had been intended here, they would have been placed upon *separate lines*, forming *separate equations*. It is contrary to the usage in the texts, and would be, if adopted, attended with many inconveniences, to place two different names on the same line, included in the same term of a bilingual phrase. Whether they were names of countries, mountains, rivers, or of persons, the invariable practice of the scribes was, to give to each Turanian name a separate line, in one column, its Semitic equivalent being placed on the same line opposite, in the Semitic column. Two names, being *equivalents*, often occupy the same column, but not otherwise. The conclusion, then, is absolutely enforced in the present example; the term *ki-en-gi* in the phrase cited, must be put in construction with the name of Akkad, and we must translate: "The *country* of Akkad," instead of "Sumir and Akkad." There is another text, cited by Prof. Lenormant, in which the expression *ki-in-gi Akkad-ki*, in the Turanian column, is equated to *mat*—, in the Semitic.<sup>18</sup> Here, *mat*, in the Assyrian column, is determinative of country; a portion of the sign *Ak* is said to be distinctly recognizable on the tablet following; but the rest of the name is defaced. Obviously, as Prof. Lenormant supposes, the name of Akkad, written phonetically—*Ak-ka-di*—was the original reading. This example only goes to show that *kingi*, a variant of *kiengi*, was put in construction with the name of Akkad, and was not to be taken as a separate name.

The invariable usage in the texts, then, renders it necessary, in the examples cited, to discard the interpretation of *kiengi* as a distinct title, and to construe this term in accordance with Prof. Lenormant's views. It results from this, that the Turanian kings of Chaldæa, appertaining to the first dynasty, did not place the name of Sumir before that of Akkad, in the titles assumed by them. They claimed to be simply the kings of Akkad, and this name must have been, therefore, the proper designation of their own race and language. It was only subsequently, on the rise of the Semitic power, that the name *ka-me-ku*, and its substitute, *Sumir*, came into use; and, as it was a designation of the Semitic element of population, it was uniformly placed before Akkad, in the titles of the Semitic monarchs, until, finally, it

18. 2 R. Pl. 50, l. 49. Cf. *Etudes Accad.*, i, pt. 3, p. 85.

was supplanted by *Assur*, as already stated by Dr. Oppert. These facts seem to us conclusive in favor of the Accadian hypothesis, as formerly received by the generality of Assyriologists.

We return here a moment upon the habitual practice of the scribes, in the pluri-lingual texts. As before stated, the majority of Assyriologists heretofore have rendered the expression *Ki-en-gi Akkad* by "Sumir and Akkad." So long as we had no bilingual phrase, by which to test this rendering, it was impossible to prove it incorrect. But we have now two facts: *First*, the bilingual list already cited, as rendered by Mr. Smith, including over seventy different equations. In the one referred to, the phrase *Kiengi ki Akkadki*, in one column, is translated by this author, "the Sumir and Akkad." *Second*, Is the uniform practice in the texts, of placing only one name in each term of a bilingual phrase. This uniform rule is a clear demonstration, so far as we are able to perceive, that the foregoing phrase must be construed as only one name—"The country of Akkad"—and thus, that the usual rendering, heretofore, should be abandoned.<sup>19</sup>

#### NOTES ON THE CONFUSION OF TONGUES IN THE LIGHT OF MODERN LEARNING.

REV. W. S. HAWKS.

The first verse of the ninth chapter of Genesis contains the important Hebrew words which are a key to the interpretation of the biblical narrative. They are, **אֶת וּדְבָרִים אֶחָדִים**, *אֶת שֵׁפָה* literally, *lip one and words one*; or as rendered by Murphy, "*one lip and one stock of words*."

The distinction between *שֵׁפָה* and **דְּבָרִים** is radical. In the sixth verse of this chapter it reads—"The people is one, and they have all one language," *שֵׁפָה lip*; and in verse seventh, "Let us go down and there confound their, *שֵׁפָה lip*;" and in the ninth verse, "Therefor is the name of it called Babel; because the Lord did there confound the *שֵׁפָה lip*, of all the earth."

The **דְּבָרִים words**, were declared to be one; and nothing is said of their experiencing any change. We understand that they were left unmolested; but the *שֵׁפָה lip*, which, up to this time, had also been uniform, was now sadly confused.

Before the confusion of Babel all people not only had the same words, but they used them alike. That which God did to the ambitious builders of the Tower was to set them to *liping*, *mouthing* or *pronouncing* their words differently. That which

19. NOTE.—The inscription of Agu-kak-rimi, dating, according to Mr. Smith, (Assyr. Dis., pp. 225-228) from the period 2,000 B. C., alludes to the *Ak kadi*, but has nothing of the *Sumeri*. This king appertained obviously to the pre-semitic period, and belonged to the Turanians. The inference is, that the name *Ak kadi* thus early employed, designated the Turanians, and that, after the rise of the Semitic power, the term *Sumeri* came to be employed to denote the Semites.

is spoken of in the seventh and ninth verse as being confounded is their *שִׁתָּה* *lip*; that with which they shaped or pronounced their words. And it is expressly stated that up to this time they all had the same words; and now no reference is made to any change; the only change is in respect to their use. The confusion did not result from the introduction of new words, but from the variation of the old; the latter remained as the roots of language, or the underlying substance of speech. By some mysterious agency they were set to pronouncing old words in a different way; giving them a different sound and accent; doubtless very soon various affixes and suffixes appeared, which caused more and more difference in the speech, separating more widely those who still had the same essential words, or roots of speech, and who once lipped them alike.

Divine inspiration gives this as an explanation of the different and unlike languages spoken by the inhabitants of the earth, whom it expressly declares are "of one blood."

During the past century it has been quite fashionable to sneer at the Mosaic solution of this problem; and some of these sneers have come from those supposed to be able scientific scholars. In like manner, till within a few years, the Noachian Flood and Noah's Ark was the special target for the shafts of cavaliers; and they sharpened their arrows by saying, there was abundant evidence of so many distinct species, that by no possible means could Noah have got even one of each kind of animals into the Ark, if the Flood was universal; and not two of unclean and seven of clean ones, supposing the calamity to have been local. But now this weapon is dropped; and we have pressed upon us, with the assertion that we are unscientific if we do not at once accept it, the claim that all animal creatures are developed from a common centre. Mr. Darwin says from some seven or eight progenitors; but his disciples go further, and say from one. For candid and honest minds they have already explained the problem of the Ark. Mr. Darwin has helped solve and establish the truth of the Scriptural account of the animals preserved in that wonderful vessel; for the number of species is now so reduced, that two of each unclean and seven of each clean species, could have been taken aboard with plenty of room to spare for provisions.

So also the claim that God "hath made of one blood all nations of men," has been denied again and again. We have had objections from the shape of their skulls, the color of their skin, and the radical difference in their language. And these facts were thought to furnish overwhelming proof against the bible narrative that all races of men were of common stock, descended from one single pair.

Max Muller, in his lectures on \*Darwin's Philosophy of Language, speaking of the difference between Darwin and his opponents, says: "I am old enough to remember the equally authoritative statements of the most eminent naturalists with regard to the races of men. When my own researches on language and the intellectual developement of man led me to the conclusion that, if we had only sufficient time (some hundreds of thousands of years) allowed us, there would be no difficulty in giving an intelligent account of the common origin of all languages, I was met with the assurance that, even hypothetically, such a view was impossible because the merest tyro in anatomy knew that the different races of men constituted so many different species, that species were the result of different creative acts, and that the black, brown, red, yellow and white races could not possibly be conceived as descended from one source. Men like Pritchard and Humboldt, who maintained the possibility of a common origin, were accused of being influenced by extraneous motives. I, myself, was accused of a superstitious belief in the Mosaic ethnology. And why? Simply because in the science of language, I was a Darwinian before Darwin; simply because I had protested against scientific as strongly as against theological dogmatism; simply because I wished to see the question of a possibility of a common origin of languages treated, at least, as an open question. And what has happened now? All the arguments about hybridity, infertility, local centres, permanent types, are swept away under the powerful broom of developement, and we are told that not only the different varieties of man, but monkeys, horses, cats and dogs, have all one, or at most four, progenitors; nay, that 'no living creature in Europe at least, dares to affirm the independent creation of species.'"<sup>†</sup>

Thus we see that within a century it has been claimed that the differences of the race of man were so great that all men could not possibly have descended from one pair; it was claimed that there must have been several distinct starting points. The statement of Gen. xi: 1, that all mankind were once of one language and the same words, was, with many, a butt of ridicule; they claimed that the differences of speech were too great to admit that men could have had a common origin. And cavilers were not wanting who sneeringly suggested that the Mosaic account of the confusion of Tongues was a fiction, invented to reconcile the fact of unlike speech with the bible story of the unity of the race in Adam.

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\**Eclectic Magazine* for July, August and September, 1873.

† Carl Vogt.

These cavils had almost unchecked sway among those scholars who were unfriendly to christianity, till in the latter part of the last century, Sir William Jones startled European scholars by declaring: "No philologer could examine the Sanscrit, Greek or Latin without believing them to have sprung from the same source which, perhaps, no longer exists;" and more to the same effect, which is familiar to scholars. Sir William had, with others, just formed the Asiatic Society at Calcutta, and they in studying the languages of India were struck with their apparent kinship to those of Europe.

This discovery set the tide to running in the other direction, and scholars on every side began to hunt up evidence to show all languages to have relationship, as industriously as some had before sought for proof that men were not one in origin.

And now all along that old scientific shore, there is a long line of abandoned offensive works, which the enemies of the bible threw up against the claim that, "The whole earth was of one language and of one speech." Now the current has set so strongly in the other direction that Mr. Darwin claims that, not only is there a oneness of speech among *men*, but that their lowest forms of articulation are only a step removed from the higher vocal sounds of the superior animals. He instances the purring of a cat over its kitten and the crooning of a nurse over its babe; the "bow-wow" of the dog and the ejaculations "pooh," "oh," "ah," "hi," etc., of man. Muller dismisses this theory with such confident statements as these:

"There is between the whole animal kingdom on the one side, and man, even in his lowest state on the other, a barrier which no animal has ever crossed, and that barrier is—language."

"Nothing deserves the name of man except what is able to speak."

"I still appeal to one palpable fact, viz., that whatever animals may do or not do, no *animal has ever spoken*."

"The combination of two such imitative sounds, for instance, as *bow-wow*, *pooh!* might form a sentence to convey the meaning that a certain dog was harmless, that he might bark but would not bite; but as a matter of fact, no tribe even of the lowest savages has ever yet been discovered employing no more than such utterances."

"The real problem . . . is to find out why a man always learns to speak, a monkey never."

The studies of our best philologists thus far are surprisingly confirmatory of the claim of Gen. xi: 1. They find, not only all the many languages of India, Northwest Asia, and all of Europe, known as the Aryan family, to be alike, but speaking of the way in which the differences of speech were helped on, in the course of time Max Muller says:

"To deny the *possibility* of a common origin of the Aryan and the Shemitic families of speech, from this point of view, would be simply absurd."

In all the Aryan languages we find many similar word-roots; the *lips* of the languages are very different, but the underlying stock of words is traceable to a common source. And now the philologists think they are finding a kinship of roots between the Aryan and Shemitic families of speech. If it should be clearly established as a fact that such unlike *lips* as those of Saxon and old Hebrew or Chaldee are from the same source, then we shall have no difficulty in believing, as a scientific fact, that the strange tongues of the rest of the earth, like the Turanian and Hamitic families, all sprung from one stock of words which existed when the foundations of Babel were laid.

We must remember that the stock of words and forms of speech then existing, must have been smaller even than that of the first chapters of Genesis. So, if we find as many as three or four roots which clearly are common to the Aryan, Shemitic and Hamitic languages, we establish the fact that they are one in origin. We implicitly believe this now, because Gen. x: 2, declares it. If science shall reach the same conclusion it will be a striking confirmation of God's word. Although the bible is not a book of science, yet scholars are continually finding that its unassuming statements are exactly in the line of the facts which science discovers.

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## INFLUENCE OF THE ABORIGINAL TRIBES UPON THE ARYAN SPEECH OF INDIA.

BY PROF. JOHN AVERY.

Read before the Oriental Society. (Continued from page 54.)

There are other points in the vocalism of the Aryans where we may, with more or less confidence, conclude non-Aryan interference, but we shall not attempt to discuss them in detail. Some are strictly local in their range and are not felt in the body of the speech. Such, for example, are the *ts* and *dz* sounds of *c* and *j*, which the Marathi has probably borrowed from the Telugu. Where no natural barriers separate different races, there is generally a narrow strip on either side of the dividing line where the two languages mingle sufficiently to permit easy communication. Other coincidences, though general and striking, may perhaps be as well explained by the operation of tendencies common to both races as by the theory of borrowing. We have already adverted to the habit of the popular Aryan languages of ridding themselves of combinations of consonants by assimilation, dropping, or vowel insertion.



Thus Sanskrit *sushka* becomes Prākṛit *sukkhā*, Hindi *sūkhā*, Marathi *sukā*. The same tendency prevails, in even a greater degree, in the Dravidian tongues. Thus Sanskrit *pra* becomes Tamil *pira*, *dya diya*, *dva diva*, etc. Again, the Pāli and scenic Prākṛits suffer a word to end only in a simple or nasalized vowel. The same rule applies, to some extent, in the modern vernaculars. With this we may compare the fact that every word in Telugu, Tulu and Canarese must end in a vowel, while the Tamil admits to the same position also a semi-vowel or nasal. Finally, the phonetic usages of some communities are so unsettled, and the exact facts are so hard to get at, that though we may suspect foreign interference, we are as yet unable to fix upon its precise source or to estimate its weight. Mr. Beames remarks that, "To one who has spent some years in the Panjab or Hindustan, the ordinary pronunciation of the Bengalis and Oriyas certainly sounds uncouth and foreign, and as these two races are surrounded by and much mixed up with non-Aryans, it is probable that the contiguity of the latter will eventually be found to have had much to do with this peculiarity."

We turn now to our second point and inquire whether any non-Aryan influence can be detected in the changes which the word-formations of the ancient Aryan speech have suffered in the lapse of twenty-five centuries. We cannot expect to come to any intelligent conclusion unless we first clearly understand the nature of these changes, and also rightly apprehend the character of the word-formations of the aboriginal tongues. The modern vernaculars have traveled very far from the parent tongue in their word-forms, and a superficial survey of their condition gives an impression of foreign interference which more attentive study fails to confirm. If we go back to the Pāli, the oldest surviving offspring of the Vedic dialect, we find a language still synthetic, with a system of inflections somewhat altered and abbreviated by the operation of euphonic laws and the loss of forms, but yet essentially the same as in the Sanskrit. Coming down to the scenic Prākṛits we find the inflectional suffixes still further disguised, confused and shortened, but still capable of being traced back to their Sanskrit originals and still joined to the base after the manner of the inflecting languages. From this point we are unfortunately left in the dark regarding the popular dialects until they emerge to view in the great epic of Chand Bardāi. At this point they have just left the synthetic stage and entered upon the analytic, which is a marked characteristic of them at the present time. All of these languages retain more or less scanty traces of case terminations in the variations of the oblique base of their substantives, but require in addition the aid of post-positional particles answering

precisely to our prepositions. The Gujarati has a proper instrumental case and the Bengali a genitive in *asya*. The verb is mostly formed by participles helped by the substantive verbs. All the languages retain a synthetic present; some also a future, and the Marathi traces of a subjunctive of the same sort. If we turn to the non-Aryan languages of India, we find them all, so far as known, belonging to the synthetic class and to that branch of it known as agglutinative, a stage of development far below the inflectional to which the Sanskrit and its daughters belong.

Coming back to our starting point, we inquire whether, under the circumstances, the aborigines ought to shoulder the responsibility of breaking down the old Aryan system of inflections, or whether we are to regard it as an advanced stage of growth to which many, perhaps all, languages ultimately come, if allowed a sufficiently long period of uninterrupted development. We are inclined to adopt the latter alternative for the following reasons: 1. The fragments of case endings which have survived, and the post-positions which supply their place are all of purely Aryan origin. 2. A remarkably close parallel to the career of the Aryan dialects is found in the Romanic languages, which, without any non-Aryan interference, passed from the synthetic to the analytic stage. This has been clearly shown by Mr. Muir and Mr. Beames. 3. One of the last things which a people is willing to give up is their system of grammatical forms. The Turkish admitted a host of Arabic words, but retained its agglutinative structure. The Hindu has been deluged with Arabic and Persian vocables, but maintains the characteristic structure of its sister languages. To assume, then, that the vast change which has come over Aryan inflections since Vedic times is due to the aborigines, is to credit a partly subject people with too great an influence. We prefer to regard the change as the outgrowth of forces latent in the Aryans themselves, working silently but ceaselessly through many centuries. 4. As Mr. Beames has remarked, the aborigines could only affect Aryan speech in a way to bring it into closer agreement with their own, yet we have seen that their languages are synthetic and not analytic. 5. Mr. Beames has also pointed out that the Aryan vernaculars did not become analytic until about the tenth century, long after the bulk of the non-Aryan population of Northern India had either been driven out or thoroughly amalgamated with the superior race.

Leaving now the subject of inflections we take up our third and last point, and inquire whether the aborigines contributed aught to the vocabulary of the Aryan languages. Here we are embarrassed by a lack of precise statistics and must content

ourselves with general statements. Though the Aryans were loath to exchange their grammatical system for that of their neighbors, they could with great convenience and without loss of dignity accept a loan of words. This they had the good sense to do, though we regret that they did not always have the conscience to acknowledge their indebtedness. We may expect to find fewest aboriginal words in the Sanskrit, more in the Prâkrits (including Pâli), and most of all in the modern vernaculars. The reason of this it is hardly necessary to state. Imbedded in the Sanskrit were all the hoary traditions precious to the Aryan race. With sleepless vigilance it was guarded from contact with profane lips by the keepers of the sacred oracles. But the Brahman hierarchy grew up too late. The stream came to them already polluted by foreign admixture. Some words which could be spared they ignominiously expelled; others they made a lame attempt to derive from Aryan roots.

On the other hand the Prâkrits were long the speech of illiterate rustics, who did not set such a store by their blood, but were willing, without giving up the essentials of their ancestral speech, to add to it anything which would further their convenience. The modern vernaculars broke more completely loose from tradition, and, being esteemed vulgar by the Brahmans, escaped from their surveillance and went their own way. They naturally received more from the aborigines where the latter adjoined their territories or formed a large fraction of the population of the same district. A counteracting influence has, however, grown up in some quarters with the spread of education and the development of a native literature. Originating in an intense desire for Hindu nationality it seeks to stem the current of foreign influence by a wholesale resurrection of Sanskrit vocables to take the place of current terms. The number of aboriginal words in Sanskrit does not seem to be large. Dr. Caldwell cites a list of thirty words from the Dravidian languages, and adds twenty-four more selected from a list by Dr. Gundert. Of these fifty-four words, fourteen are found in the Rig-Veda. The foreign origin of several words in these lists seems very doubtful. In the *Indian Antiquary* for August, 1872, under the title "The Dravidian Element in Sanskrit Dictionaries," Mr. Kittel gives a list of more than one hundred words, mostly taken from under the letters *a* and *â*, which he refers to the same source. Dr. Caldwell suggests that some of these words may have had an independent origin in each family from a common source. These lists make no pretense to completeness, which can only be after the languages have been subjected to a far more penetrating scrutiny than is at present possible. We have assumed as probable that the

Prākritis contain more non-Aryan words than the Sanskrit, but unfortunately we cannot bring much direct proof to substantiate the assumption. Though they are confessedly of Sanskrit origin, there is a considerable number of words which cannot be traced back to the mother tongue. The Indian grammarians recognize this strange element and call it *desi*, "provincial." It is quite probable, as Mr. Muir suggests, that the specimens of Prākrit literature which have come down to us, being the work of learned Pandits, contain much less of this *desi* than the language in daily use among the people—a fact which is certainly true of the modern vernaculars. This residuum, after drawing off the pure Sanskrit, is variously analyzed. Some scholars regard it as nearly pure Aryan, which, discarded from the Sanskrit as vulgar, has survived in the mouths of the people. Others see in it an aboriginal infusion. The most probable theory is that it is a mixture of both. When we come down to the modern vernaculars we are able to get more decided, although still indefinite information. In the phraseology of the Indian grammarians the words in their languages fall into three classes: 1, *Tatsama*; 2, *Tadbhava*; 3, *Desaja*. By *Tatsama* is meant words which have been imported without change of form from the Sanskrit, but sometimes varying slightly in pronunciation. *Tadbhava* words are those which have come down from the same source through the Prākritis and have suffered such changes in form as those dialects regularly produced. The *Desaja*, "country-born," words are supposed to be of the same character as the *Desi* words of the Prākritis. The exact proportion which the latter class of words bears to those of Sanskrit origin has not been accurately estimated, but it is certainly known that their number varies greatly in the different dialects. They occur least often in the strongholds of Brahmanism, and most frequently where there is or has been the greatest admixture of non-Aryan elements in the population. They are used least frequently by the literary Hindu, and are oftenest heard on the lips of the rustic in the fields. In Hindi the number appears to be very inconsiderable. Colebrook expressed the opinion that nine-tenths of the Hindi dialect might be traced back to the Sanskrit. Whether he included Arabic and Persian in the remaining tenth is not stated. The following statement regarding the constituents of the Marathi is by Dr. John Wilson. It "has two distinct lingual elements, the Scythian (or Turanian) and the Sanskrit. The Scythian element is obviously the more ancient of the two, as far as its present locality is concerned. It is still a good deal in use, especially among the lower orders of the people, and in the business of common life. It claims almost all the words beginning with the cerebral letters, which,

as initials, were probably not in use in the Sanskrit; almost all the words beginning with the letter *jh*, and a great majority of the words formed from imitative particles, both simple and reduplicated, which are often very expressive, and are not now of an arbitrary character, whatever they may have been before they got established in the *usus loquendi* of the people by whom they were originally formed." Dr. Wilson, referring to Colebrook's estimate of Sanskrit words in Hindi, adds that the same thing is true of Marathi. By the term "Scythian" is meant what we have described as aboriginal or non-Aryan. But probably the largest influx of non-Aryan words has occurred to the Bengali and Oriya. This may be inferred from the statement of Mr. Beames that, "In Orissa the traces of a large non-Aryan element in the population are patent to the most superficial observer, and the same may be said of Bengal; but unfortunately neither of these provinces has as yet been examined, either as to their language or ethnology, as thoroughly as could be desired." The Aryans entering India from the north-west seem to have penetrated the aboriginal population like a wedge, parting them far asunder at the base and concentrating them about the edge. Dr. Hunter, in his *Annals of Rural Bengal*, speaks as follows of the linguistic relations of that province: "The patois of Lower Bengal, particularly as spoken by the common people of Bêerbhoom and other districts on the ethnographical frontier, is full of words not to be derived from the Sanskrit, and though such words are carefully excluded from written Bengali, they are ever in the mouths of the husbandman, the herdsman and the forester, and they have furnished the domestic language of affection in which the mother speaks to her child."

If now we sum up the results of our inquiries, we conclude that in spite of the foreign pressure brought to bear on them, the Aryan languages have nobly held their own. They seem to have yielded so far as to adopt a few entirely new sounds and to modify some which they already possessed, and likewise to admit a considerable number of foreign words in order to facilitate communication; but in their system of declension and conjugation in all that is essential to the identity of a language, they are as truly Aryan to-day as three thousand years ago.

## GENESIS AND ABIOGENESIS.

BY M. C. READ, HUDSON, OHIO.

The most remarkable ancient cosmogony is that found in the first chapter of Genesis, ordinarily attributed to Moses, but probably of a much earlier origin than the date of the compilation of the Pentateuch. It is alike remarkable for the simple grandeur of the narrative, for the coincidences between its statements and modern scientific theories, and for the facility with which it has been so interpreted as to keep it in harmony with the changing theories of modern times.

The changes in interpretations, made to adjust it to astronomical and geological theories, are well known to every Biblical scholar and need not here be repeated in detail. It will be sufficient to refer to one statement alone, and that is the one that describes the formation of dry land. This is represented as the result of God's command "Let the waters under the heavens be gathered together in one place and let the dry land appear, and it was so." It has long been conceded that this is entirely consistent with the paleological theory, that the seat is the mother of the continents, and that these have been slowly emerging through countless ages; that this process of continent making is still continued, and that it is all under the control of what we call natural law.

But as it was once assumed that geological theories, now well established, were in hopeless conflict with this cosmogony, so it is now asserted that the latter can in no way be harmonized with modern theories of evolution.

Without undertaking to show how much of truth there is in any of these theories of evolution, or how much of binding authority in science should be conceded to this narrative, it may be well briefly to enquire whether there is or is not any difficulty in adjusting its interpretation so as to leave it in harmony with the most extreme theories of evolution.

The most obvious interpretation of the first two verses of the narrative is that they are merely introductory and intended simply to assert the fact of a Divine Creation; assuming, as all other cosmogonies assume, the existence of the earth and all the materials of which it is composed, the creation described being not the genesis of matter, or of geological strata, but the arrangement in an orderly cosmos of the present "æon"—the fitting up of the earth for and providing it with its present inhabitants. Here it is in full accord with science which does not enquire into the origin of matter, but assumes its existence, and the existence of the forces manifested through it, and only seeks to explain how, through the operation of these forces, the present

order of things has been produced. Science teaches also in common with the author of this narrative that there has been a beginning of this æon or cosmos in the study of which it is occupied. For if, as Spencer teaches, all things are tending towards a stable equilibrium, or, as astronomical and geological theories teach, the earth and planets are cooling down from a state of intense heat, or are moving on towards their ultimate homes in the sun, there must have been a finite beginning of these tendencies, else the goal would be already reached.

The beginning of the manifestation of that formative power, which has produced the present cosmos, is described by Moses as the breath or spirit of God brooding or incubating upon the face of the waters. The figure is that of a bird sitting upon its nest, and thus slowly effecting those changes which result in the appearance of new beings. The expression which follows, "And God said 'let there be light,' and there was light," must be read as indicating the result of this influence already described in metaphor, if significance is to be given to all parts of the narrative. It must be considered also in the light of that Hebrew characteristic, which, overlooking secondary causes, attributes every fact in nature to its primeval first cause. As, "He toucheth the hills (with lightning), and they smoke." "He scattereth the hoar frost like ashes." "He bringeth the rain out of his treasures," etc.

When the writer comes to this introduction of life, he represents all living things as produced by the water or by the earth, as verse 11, "And God said 'let the earth bring forth grass,'" etc., "and the earth brought forth grass and herb yielding seed after its kind, and the tree yielding fruit," etc.; verse 26, "And God said 'let the waters bring forth abundantly the moving creatures that have life, and fowl that may fly above the earth,'" "And God created great whales and every living creature which moveth, *which the waters bringeth forth abundantly*;" again verse 24, and "God said 'let the earth bring forth the living creature after its kind, cattle and creeping things, and wild beast after its kind,' and it was so." These statements do not merely imply but directly assert that all these organisms are born of, or are brought forth by the earth, or the water. The repetition of the statement in another form after each of these passages, "and God made," etc., these different organisms may well be intended to affirm that this work, this bringing forth of living organisms by the earth and by the water, this abiogenesis, is God's work, is the result of that influence over all material things represented in the beginning of the narrative under the figure of a brooding bird.

The order of the appearance of these organisms, so far as it is disclosed, is in full harmony with the order which evolution teaches.

One part of the Mosaic classification is peculiarly significant, that is the grouping of birds with the animals produced from the water, which includes apparently all reptiles. Now ornithological embryology shows that all birds were originally aquatic and web-footed. They are shown by biologists to be closely allied to reptiles, being grouped in the same class by Huxley, but until the theory of evolution was advanced in modern time no naturalist assigned them their true place as accurately as is done in this first chapter of Genesis. Whatever havoc destructive criticism may make with the Mosaic record, this remarkable fact will remain, that its author has assigned to the birds their true place in the orderly arrangement of the animal kingdom as determined by the facts upon which the theory of evolution is based, while it is a position which apart from the study of these facts would be regarded as absurd. Birds fitted to run and walk upon the earth, to swim upon the waters and fly in the air, seem to the casual observer to be the most highly organised of all animals. But their true place as demonstrated by modern research is next to the reptiles to whom they are closely allied in structure, and with which they are directly connected by extinct reptilian forms.

The attempt to find in the six days of creation six definite geological epochs has not been satisfactory, either to the Biblical student or the geologist, probably because the writer did not intend to describe the formation of geological strata or extinct forms of life. In a few lines the original genesis of living organisms is described, and this is described as an abiogenesis, or bringing forth of them by the water and the earth, and this is the theory of the most extreme evolutionist.

The theist, who is also an evolutionist, believes that the primal force of which all organisms are the product, is the divine will, operating continuously through what we call natural law. He believes that the spirit of God broods over the water and is present in, or is represented by, all the forces of nature, and that he who could understand fully the simplest organisms, would know more of that great first cause that it is permitted to man, with his limited faculties, to know.

"Flower in the crannied wall,  
I pluck you out of the crannies,—  
Hold you here, root and all, in my hand  
Little flower,—but if I could understand  
What you are, root and all, and all in all,  
I should know what God and man is."

This is the spirit with which a theistical evolutionist studies nature, a spirit with which the author of the first chapter of Genesis is in full accord.



## THE DISCOVERIES AT NINEVEH.

THEIR FORCE IN CONFIRMING THE HISTORICAL STATEMENTS OF THE  
SCRIPTURES.

BY W. W. TAYLOR, DELAWARE CITY, MD.

The writer of this article, shortly after reading Layard's volumes giving an account of his excavations at Nineveh, had the good fortune of making a voyage to Europe.

On arriving and getting settled in London my first stroke at sight-seeing was to make my way to the old Montagu House, now the British Museum, where, to my surprise and great joy, I found the whole collection brought home from the banks of the Tigris.

In a moment I was transported into the presence of Assyrian greatness under more comfortable circumstances than Mr. Layard's surroundings, when, lifting and sweating in the dust, amidst the struggling and shouting Arabs at Mosul. There, in spacious rooms, clean and placed in regular order, the great winged bulls with human heads and faces stood forth; the alabaster slabs, covered with sculpture and inscription, were cemented around the walls, and the multitudes of curious articles, bearing the memories of three or four thousand years, were laid out for leisurely inspection.

Whilst wandering among these relics of the past, I was accosted by some English ladies who furnished me with a notice of a lecture to be delivered the next day by Mr. Layard himself, for the benefit of a church, in the distant suburb of Pentonville. I took care to be there. Mr. Layard, now Sir Henry, and long the British Ambassador at Constantinople, I found to be a well built, energetic and affable gentleman. He was supported as chairman by a member of Parliament. Being introduced to the lecturer after the session, he spoke most highly of our American missionaries in Turkey, declaring that they would settle the Eastern question.

Nineveh was visited for exploration by M. Paul Emile Botta, a French archaeologist, when consular agent at Mosul, in the year 1843, and many of the discovered monuments were carried to Paris and placed in the Louvre. His success opened the way, and, no doubt, stimulated Mr. Layard to enter upon his more important and successful labors in 1845. Words cannot do justice to the zeal and fortitude of this persevering and indefatigable explorer. By a systematic plan of digging he traced the foundations of the city walls, for sixty miles, enclosing a space somewhat in the shape of a square. One great gate was

revealed, in an unfinished state, built by Sennacherib, the wide entrance of fourteen and a half feet being guarded by two human-headed, winged bulls, fourteen feet long, carved from blocks of gypsum, with two colossal winged figures crouched behind; and on the limestone slabs forming the pavement, marks of wheels could be discerned, as chariots, armies and processions, a thousand times, had passed in and out more than 2,500 years ago.

The great mounds of earth out of which Nineveh has been brought up have been accumulating for long centuries. They cover an area of an hundred acres, and might weigh fourteen millions of tons of dust and rubbish, and being of an elongated oval shape, give the appearance of some monstrous grave, covering the corpse of an enormous giant. The description of these mounds readily suggests the singular prediction of the Prophet Nahum (Chapter I.), made eighty-seven years before Nineveh's destruction: "*I will make thy grave.*" In fact, in that grave lay the buried city, fire and water operating to level its stately walls and buildings, but leaving the foundations and cellar chambers, even protected by the onlying masses of wood and stone.

In using the various treasures recovered from Nineveh, to corroborate the Scripture history, it is necessary, as a preliminary step, to give some account of the rise, growth and sovereignty of the city and of the Assyrian Empire, of which it was the capital, and of the overthrow of each. To tell such a long, obscure story, the various sacred and secular records at hand must be carefully used, though it will not be possible to go into curious details of every age, nor make sure that every statement is infallibly correct.

From the tenth chapter of Genesis it appears that Nimrod, the greatgrandson of Noah, was the founder of the city and the empire. From the separate notice of his birth (verse 8) something distinguishable is to be noticed, as he becomes the most noted character of that early period. The record makes him a mighty one in the earth. He made a beginning in the land of Shinar, but early went forth to the Upper Tigris, into a country called Assyria, from the name of Shem's second son. This going forth was doubtless in a warlike style, and by the force he carried with him he securely builded the new city of Nineveh and made it the seat of his extended dominion. This was the beginning of the great Assyrian Empire. The first dynasty of rulers descending from Nimrod were, of course, Cushites, of whom thirty are enumerated living through a period of seven hundred years.

Following the chronology of the Hebrew Bible, Nimrod began his ruling about the year 2150 B. C. and his family came to an end in 1450 B. C. Then comes the first dynasty of what seems to be Assyrian rulers of the family of Shem, these also running through a period of about seven hundred years, reach down to 747 B. C.

A second dynasty of an Assyrian family now took and held the throne for an hundred and twenty-two years, reaching to 625 B. C., when Nineveh was entirely overthrown and left in the state in which the recent explorations have found it.

Although it seems to be demonstrated that papyri were in use in the very ancient ages, yet no paper records have come into our hands. The Assyrians made grand use of the printing material at their disposal, and whilst the antiquarian is gratified at the old remains just because they are old, the lovers of Bible truth, whilst their taste for old times happenings is as happily nourished, find invaluable aid in this independent and unassailable testimony for the defense of a book whose accuracy is assailed by many unfriendly critics.

Such will acknowledge the providence of God in so wonderfully preserving confirmatory evidence of the sacred records such as the skeptic cannot doubt nor the gainsayer refute, and they will thank that faithful, watchful power which, *for such a time as this*, causes our dear old mother Earth to speak, and from various quarters to let out the long detained voices, that, like some grand, original phonograph, declare the pen of Scripture is true and faithful to her maker, God, and her children, men.

Each of the great kings built his own palace, of many of which the foundation plans and cellar portions have been traced and opened, some of them filled with valuable remains in good preservation. Many great halls and chambers, elevations and passages were plainly traced. A hall in Esarhaddon's Palace is 220 feet by 100. This king employed Greek and Phœnician architects on his buildings, and it is noticed that the later palaces are more beautiful in spirit and design and more delicate in execution than the older, whilst the sculptures are more occupied with hunting scenes than military operations, showing, it is thought, a gradual decline in the military art. A hall in Sennacherib's palace is 124 feet by 90, finished with Lebanon cedar. In a single palace seventy chambers were distinguishable, and twenty-three were opened in the oldest royal building. Since Layard, three spacious halls have been discovered, 150 feet by 125, and two galleries, one of them 200 feet long, the other 185.

According to Rawlinson, Sennacherib employed 360,000 men at forced labor upon his structures, and his palace is in such

preservation that from ground place and walls, with some traces of the style and finish, a good idea has been gained of the whole building. Aided by better preserved structures of the same age, at Persepolis, drawings have been made and the whole grand house of royalty restored as if in its original life. It was rebuilt at Sydenham Crystal Palace of Education and Art, six miles from London, where I had the good fortune to look upon it before its burning. One could ascend to the grand entrance, mount to the high, broad pavement, guarded by colossal figures, look up amidst the lofty architecture extending for three or four stories, drink in with the eyes the gorgeous front, supported and graced by majestic pillars, and enjoy the life-like movement of the scene by the presence of Assyrian guards standing around, and the King himself walking across the mosaic pavement, under the golden portico.

The lower halls and chambers of each palace are lined with slabs of gypsum and alabaster, on which is inscribed, in Assyrian characters, the history of the several kings who built them. In addition to the writings, are sculptured pictures of historical scenes, finely cut and well preserved, representing battles, sieges, cities and forts, rivers, boats, horses swimming over the waters and men supported on bladders; horsemen, chariots, hunting excursions, table scenes of eating and drinking; tribute bearers, gods worshipped, the King fighting from his chariot or walking with his officers, nobles, eunuchs and soldiers; also executioners and all sorts of barbarities inflicted on prisoners, who are beheaded, impaled, hung up on hooks and skinned alive; women are being dragged by the hair and captives; men and women led away, the men on foot, chained and guarded, the women and children loaded on ox carts.

These pictures are all true to the life, cut with precise and elaborate skill, some of the personages being adorned with gorgeous dresses and appropriate ornamentation, and looking as if finished yesterday. Such care is bestowed on the curling of the long beards worn by the grooms and the horses' manes and tails, that it might be thought an artist' lifetime must have been given to a single curl or beard.

Besides the inscriptions and sculptures very many figures, cut out of blocks of gypsum, have been recovered. As has been noticed, some of them are monster-shaped, though they do not look monstrous, having human heads and faces with bull bodies and eagle wings, lying down the back. There are, also, lions, bulls, sphinxes and a variety of other colossal shapes. An hundred of these are in the British Museum, so tall that one may stand and look up into the human faces, broad, large-featured countenances, with great open eyes and curling beards, and of

such grand benevolent aspect that you wonder how such faces could be associated with such barbarities as are witnessed on the slabs.

Besides what has been named, innumerable small, detached objects and utensils have been picked up, to show the arts and fashions prevailing three thousand years ago. Among them are seals and signets, armor and old thrones, bells, horse trappings, bronze and ivory ornaments, beads, necklaces and bracelets; a copper caldron and copper mirror, dishes and cups, shields, pickaxe, saw, ivory sceptre, glass and alabaster vases, a lens of rock crystal, a magnifying and burning glass, a chisel and a golden mask. From this list the names of many articles, for the sake of brevity, are withheld.

Some very fresh discoveries at Nineveh have just now been published. From Chief Justice Daly's address before the American Geographical Society it is shown that the Assyrians were acquainted with the existence of spots on the sun, an astronomical fact that could not be known without the aid of telescopes, and these, it is therefore supposed, they possessed. An Assyrian Cyclopaedia, printed on bricks, has been deciphered, from which it seems the world then went on pretty much as it does to-day. They bought and sold and leased houses and lands, not only, but *mortgaged* them, and lent money on interest. The farmers worked on shares and the plowmen sung their short and lively doggerels to beguile their toil. They had libraries and librarians, and on a brick that certainly was a *brick*, was a notice, printed, that visitors should tell the number of the book they wished to consult and the librarian would have it brought to them. Some light is thrown upon this brick and clay writing by a further notice of Mr. Layard's discoveries. One of the most curious and valuable of these was the opening of what might be called the record chamber, the floor of which, for a foot thick, was covered with tablets and little clay cylinders, written over when soft and then baked hard, done in such fine, distinct characters as to require a magnifying glass to spell them out. Among them were chronicles of Esarhaddon's reign and eight years of Sennacherib's history; also, legal contracts and conveyances of land, sealed and stamped.

The sixty miles circuit of city wall includes a group of suburbs that became consolidated into one grand capital, the different districts answering to the cities named in Genesis x: 11-12.

From the various sources brought to light by Layard and others, before and since his day, much of the history of the Assyrians has been obtained, both that which transpired before they were brought in contact with Israel and Judah, and that

which happened during those ages. On these historic walls, from these sculptured slabs and arrow-headed inscriptions, not only are the manners and customs that prevailed in Bible times illustrated, but hardly anything mentioned in the Scriptures in connection with Assyria is left unnoticed; every event of importance in close particularity is confirmed by the Assyrian annals; every king's name of Judah and Israel, with names of cities, with which Assyria had anything to do, is therein found.

An exact accord, Rawlinson declares, prevails between the Scripture accounts and the discovered monuments, and lovers of the Holy Book are allowed to enjoy this agreeable fact and make the most of the wonderful argument furnished by *this first resurrection of the dead*, as we almost may call these liberated voices.

Let us bring together these many happy resemblances.

The most notable discovery illustrating this head is one of late years made by Mr. George Smith, of the British Museum, who, after repeating his visit to the scene of his labors, died, heartily lamented, at Aleppo, on his way home to England. The new inscriptions are Assyro-Babylonian, found at Nineveh, and consist of two sets called the "Deluge Tablets," whose formation Mr. Smith assigns to the period 2000 years B. C. as the lowest supposable date, and the "Creation Tablets," composed about 100 or 150 years later.

The accord between these two sets of inscriptions and the Bible record is complete. In both we have accounts of the earth's earliest days and of the particulars of the deluge. The "Creation Tablets" give the details of that eventful history, showing the origin of the two first parents and their fall. The "Deluge Tablets" tell of the flood brought about by the rain and sweeping over the earth; the ark floats on the surface; Noah and his family are safely carried in the great ship; living creatures are therein preserved; the raven and the dove are sent forth to look after dry land, and the waters again subside. The resemblances in these two widely separated records are so striking as to suggest a common origin for both, and a close study discovers such numerous and exact coincidences as almost to prohibit the belief of different sources of information.

Rev. O. D. Miller, in *THE ORIENTAL JOURNAL* for April, argues that Abraham must have been acquainted with Biblical facts, that were well known in Chaldea, and may have carried copies of the records on papyrus, that afterward appeared in the inspired Genesis, out of Ur, into the promised land. It may be added, that his quick submission to Jehovah as the God of Glory that appeared to him, looks as if he had some knowledge, from some source, of an Eternal Creator—God—which then became practical in his conversion and subsequent faith.

It must be said, however, that whilst the Assyrian accounts contain the substantial facts of Genesis, yet the story is disguised, just as we imagine a record would be that came in a legendary form by oral traditions without an inspired pen to overrule, being tintured also with idolatrous imagery and language.

Passing on now from Genesis to the book of Kings, we find other confirmations of the sacred record.

The Assyrian king Shalmanezer IV reigned from 726 to 721 B. C. He invaded Israel and made Hoshea, the king, his tributary. He came against him a second time, besieged Samaria, and in three years took it and carried all the people of Israel captive to Assyria and Media. The Scripture (II Kings, xvii and xviii) names Shalmanezer as the invading and besieging king, but says in the seventeenth chapter that *the King of Assyria*, without giving the proper name, took it, and in the eighteenth chapter, *they took it*.

Now Layard finds, from the monuments, that Shalmanezer twice invaded Israel, and makes him the king who captured the city and led away the people into exile. Sargon, King of Assyria, mentioned in Isaiah xx, succeeded Shalmanezer in 721. He built his palace at Khorsabad, from which some fragments have been carried to the Louvre. Rawlinson thinks that Shalmanezer died or was deposed, and Sargon finished the siege of Samaria and accomplished the complete overthrow of the kingdom of Israel, which might be so, without contradicting the letter of Scripture.

Sargon, after reigning seventeen years, according to the monuments, is succeeded by his son Sennacherib, who holds the throne from 704 to 680 B. C. He is well known on the Bible pages and in the recovered annals, and in both, he is set forth as a cruel, proud and arrogant mortal. II. Kings xviii and xix, II. Chron. xxxii, and Isaiah xxxvi and xxxvii, give his story as he comes in the way of the Living God. He comes up against Judah in such overwhelming force as to make himself master of all the open country and fenced cities outside of Jerusalem, and upon Hezekiah making an humble submission the King of Assyria levies a fine or tribute upon him of 30 talents of gold and 300 talents of silver. After receiving this treasure, whilst he is besieging Lachish and Libnah, he sends a host, under Tartan, Rabсарis and Rabshakeh, against Jerusalem with threatening, boastful and blasphemous words. To these the Prophet Isaiah replies, "He shall hear a rumor and shall return to his own land." That rumor is the alarming news that Tirhakah, King of Ethiopia, is on the way to meet and fight against him. This draws him away; but after his battle with this southern power he seems to approach Jerusalem again, after having

written letters to rail on the Lord God of Israel, and then comes the word of the Prophet: "He shall not come into this city, nor shoot an arrow there, nor cast a bank against it. By the way that he came shall he return." So, after that night of smiting the blast that God sent upon him, he returns with shame of face to his own land and dwells at Nineveh. The prophecy still pursues him of which the record (II. Chron. xxxii) gives the fulfillment: When he was come into the house of his God (Nisroch Is. xxxvii) they that came forth of his own bowels (his two elder sons, Adrammelech and Sharezer,) slew him, there, with the sword.

Now all these Bible records may be read over again on these buried monuments. Our explorers have unearthed the palace of Sennacherib, a gate of his construction, sculptured slabs and inscriptions, an earthen cylinder containing eight years history of his reign, another containing a record of two years and other inscriptions giving six years. We would not expect him to record the smiting of his host, nor do we look for the tragic story of his death. He tells, however, of Hezekiah, of forty-six cities he conquered from him and of the 30 talents of gold and 300 of silver he paid him. We discern Rabsaris and Rabshakeh sculptured in their robes of office, the name of the one signifying the chief of the eunuchs, that of the other the chief cup-bearer.

The siege of Lachish, which seems to have made a stout defense, is pictured on the sculptured slabs, with Jewish prisoners undergoing all kinds of tortures in presence of the king on his throne of judgment, saying, "I permit the slaughter." Over a captured castle the legend may be read: "Sennacherib, the mighty king of the country of the Assyrians. I took the spoil and burnt the city." He carried off 200,000 captive Jews into Assyria.

It seems that, as the result of the meeting and the battle between Sennacherib and Tirhakah, a treaty was made between the two kings, and strange to say, a sculpture is found representing an Assyrian and Egyptian king engaged in such a business. There are traces of a parchment or prepared leather on which the treaty was evidently written, now destroyed, and near it the ashes of a string left just as the fire left it, with finger marks on the clay and seats. The impression of the two seals is left, one Egyptian, the other Assyrian, and besides the signet of Sennacherib has been found—a translucent green felspar.

The most striking confirmation of Scripture is the discovery of a chamber that might have been the scene of Sennacherib's death, who was slain whilst worshipping in the house of Nisroch, his god. In one of the palaces is a hall, 100 feet by 25,



adorned with alabaster slabs and carved figures, dedicated as a household chapel to this same Nisroch, that is, the Eagle-Headed Deity. Every one of these many slabs but one, contains the same carved figure of a human body with an eagle's head and wings, standing firmly, in a short tunic, covered by a longer robe, trimmed and embroidered, the tongue still tinged with red paint and the hair thick and curly. In his right hand the figure is holding the emblematical pine cone and in the left hand is a basket. On the one slab, which is 8 feet by 3, is sculptured the king! It is the princely worshipper in the presence of his god, Nisroch, and why may not this be the room into which the two sons stole upon the solitary monarch and shed their father's blood whilst paying idolatrous worship to this senseless god?

Esarhaddon comes next, the youngest of the three sons of Sennacherib, reigning from 680 to 667 B. C. II. Kings xix, and Isaiah xxxvii, tell that he came to the throne because the murderers fled into Armenia. Ezra iv:2, contains the declaration of the new inhabitants of Samaria that Esarhaddon had brought them up into the Holy Land. II. Chron. xxxiii, records that the Lord brought the King of Assyria against Manasseh, the son of Hezekiah, who took him and carried him in fetters to Babylon. This was Esharhaddon, and of these things we have confirmation from his own written history.

A grand palace of his has been exhumed, defended by ditches, walls and forts, no doubt for fear of assassination, having vast apartments, adorned with beautiful bas-reliefs, the work of Greek and Phœnician artists, which shows how the Western world was gradually coming to the knowledge of the East, as we might suspect. From the recovered chronicles of Esarhaddon, some of which are preserved on one of the clay cylinders in the British Museum, we gain a confirmation of the extreme accuracy of the Bible narrative.

We learn that he carried colonists and settled them in the depopulated region of Samaria. He reigned alone over an extensive empire. About the year B. C. 747, on the death of Sardanapolis, King of Assyria, and the division of the empire, Belesis became king at Babylon. In II. Kings xx, and Isaiah xxxix, this king is called Baladan and his son Merodach Baladan, who sent to congratulate King Hezekiah on his recovery from sickness and to inquire of the astronomical wonder done in the land when the sun went back ten degrees on the dial of Ahaz. The Assyrian annals show that a continual hostility was maintained between the new dynasty at Nineveh and the ruler at Babylon. Merodach Baladan was expelled from Babylon by Sargon, but recovered his kingdom; was defeated in a battle by Sennacherib, and upon his death and the failure of his line,

Esarhaddon, taking advantage of the commotions at Babylon, captures the city and restores Babylonia to the old empire. His annals show that he held his court sometimes at Nineveh and at other times at Babylon, bricks at Hillah and a tablet at Babylon recording his name; and all this explains what would otherwise be obscure, why it was that his captains, taking Manasseh prisoner, carried him to *Babylon*, where their master undoubtedly was at that time. This record also shows the simple intrepidity of the sacred historians and their confidence in their own correctness, that they send out their statements without explaining what might be thought untrue, viz., that Manasseh was carried to Babylon.

Nothing that was contemplated in this article remains to be done but to take notice of the Scriptural account of the destruction of Nineveh, and of its accord with the testimony of the ruins themselves and of secular history.

It is given in the way of prophecy by Isaiah x, and Nahum, whose whole message of three chapters makes *the burden of Nineveh*. He spoke and wrote these things about eighty-seven years before an event that, Ezekiel says, Chapter xxxi, made the nations shake with the sound, at the very time that Sennacherib is at the gates of Jerusalem and desolating Judea.

It is the special providence of God revenging the *bloody city*, that is full of lies and robbery, when He makes his way in the whirlwind and the clouds are the dust of his feet. You behold the seige, you hear the noise of assault; the gates are set wide open and the forts are all taken; the warriors' shields are made red and their clothing is turned scarlet with blood; the bright sword flashes and the glittering spear circles in the hands of in-rushing horsemen! The crack of the whip urges the jumping chariots, with rattling wheels and prancing horses, raging in the streets and jostling one another in the broad ways as they shoot from point to point like fiery torches and run like the lightnings at play! They come up dashing all in pieces till there is a multitude of slain at the top of every street; even young children are dashed in pieces; and over the piles of carcases the conquerors stumble till there is no end of corpses! At the same time there comes a rushing of the river to flood the streets and of raging fire to consume the palaces, bringing uproar and confusion to the furthest extent of calamitous horror and setting the invaders at work to gather the endless spoil of gold and silver and furniture and vessels of beauty and cost, till Nineveh, whose hand had found as a nest and clutched the riches of every nation and gathered the treasures of all the earth, is left empty, void and waste!

The wretched survivors are led by long, weary journeys into hopeless captivity; lots are cast upon the children whose slaves

they shall be, whilst the great men are bound in chains for their long journey.

The walls and palaces remaining are levelled, the burning torches being first made to flash in every quarter; they are cast upon every roof; they are applied to every beautiful chamber, till Nineveh becomes one burnt and fallen ruin! And old Time, for ages and centuries, has been heaping up the sand of the desert to pile the grave away from the reach and almost from the knowledge of the world.

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### THE GAN-EDEN OF GENESIS.

BY O. D. MILLER, NASHUA, N. H.

The *substantial agreement* of the primitive traditions respecting the first abode of man on earth, as they had been inherited by the oldest civilizations known to history, is now a fact fully acquired to pre-historical science. Not only this, but the data which, until the present century, were almost wholly wanting, to give to the question of the actual geography of Eden anything but a speculative, conjectural, not to say fanciful character, have been now supplied, thanks to the results of modern criticism, sufficiently, at least, to afford the necessary basis and conditions for a scientific treatment of the problem. The result has been that, guided by the established facts, and by the essential conditions of the problem dictated by these facts, a well-defined theory has been elaborated; a theory which is held to-day by many of the best critics of Europe, if not also of America. According to this hypothesis, the actual cradle of the human race, as well before, as after the deluge, was the great plateau of Pamir, in central Asia, known as the most elevated tract of country on the globe. It was there, in fact, that the earliest traditions of nearly all the Asiatic nations centered, as having been the common home from which the various races of men originally departed for the distant countries subsequently inhabited by them. It was there, on that mountain plain which overlooks all Asia, and which, apparently, was the first to rise above the waters, both of the primordial chaos and of the devastating deluge, that was planted the first civilization known to history, and from which the earliest known men had inherited their fundamental ideas and doctrines. It was there, finally, that religion and knowledge, and the primitive notions of the origin of things, had their birth, being transmitted from thence to the most distant climes, and to after ages.

In any scientific treatment of the problem which relates to the geography of Gan-Eden, and which is to occupy us in the

present article, it is necessary to take into account certain fundamental conditions of its solution, which are dictated by the facts now known. These conditions are:

*First.* To find a terrestrial region whose natural characteristics and geographical features correspond to the uniform tradition respecting the primitive home of man, as well as the Biblical descriptions of it. The chief physical characteristics of the terrestrial paradise, according to Scripture and uniform tradition, were the following: (a) It was conceived as an elevated, mountainous region, or, better, as a mountain plateau. The prophet Ezekiel (xxviii, 13-16), refers to Eden as the "garden of God," and as "the holy mountain of God." Isaiah, also (xiv, v. 13, 14), alludes to the *Har-Moed*, or "Mount of the congregation in the sides of the north," or in the extreme north. That the *Har-Moed* was one with the Mount of Paradise, is admitted by many critics, as will be shown hereafter.<sup>1</sup>

(b) The water system of Gan-Eden was quite extraordinary: four great rivers took their rise within the limits of this traditional country, all proceeding from the same source, or, at least, from the same immediate vicinity, and taking their course toward different quarters of the globe. Not only the Scriptures, but the various inherited traditions, render this physical characteristic of Paradise very prominent. (c) It results from the features just noticed that the location of Gan-Eden was *around the sources* of that water-system with which it was connected. This follows, not so much from the individual terms employed in the Mosaic description, as from the general tenor of it. The four rivers could not possibly take their rise from the *one source within* Gan-Eden, if it were not situated around their sources, and these were naturally to be sought in a mountainous region (as before mentioned). It was not located at the mouths of these rivers, nor did it border upon them at a distance from their sources, and so Dr. Faber very properly insisted upon the point that it is necessary to look for Gan-Eden in a mountainous region, and around the sources of the river-system associated with it.<sup>2</sup>

*Second.* Another condition of the problem is, that uniform tradition identified the Mount of Paradise with the Diluvian Mountain, or that upon which the ark rested after the deluge. M. Lenormant, M. Abry, Dr. Faber, and others, take especial note of the fact here stated, and Dr. Faber labors to prove the reality of this identity.<sup>3</sup>

1. NOTE.—Respecting Paradise conceived as a sacred mountain, see Dillmann, in Schenkel's *Bibel-Lexicon*, B. ii, S. 49. Cf. Gesenius' *Jesaja*, 1st Beylage, B. ii, SS. 316-326, and Faber, *Origin of Pagan Idolatry*, i, pp. 12, 1, 20, etc.

2. *Pagan Idolatry*, i p. 296.

3. Lenormant, *Fragments de Berosé*, pp. 303-304. *Abridg. DuBerceau de l'espece humaine*, pp. 4, 5, 187. Faber, *Pagan Idol.*, i, pp. 13, 20, 137, 331, etc., etc.

*Third.* To find that locality from which it is reasonable to suppose, according to known facts, that the various races originally departed to occupy the countries where we find them settled at the opening of the historical period. This condition depends, of course, upon the one last stated, or, upon the identity of the Diluvian with the Paradisaical mountain.

*Fourth.* To find the country to which it is possible to retrace the steps of the different races, by the aid of their traditions, and the assistance of linguistic science, along the routes originally followed by them, in their migrations from the common center of populations. This condition, also, presupposes the identity of the two sacred mountains, as being the first abode of man both before and after the deluge.

*Fifth.* There was a distinct astronomical element in the traditions relating to the birth-place of humanity, to be noticed more at length hereafter. In other terms, there was a celestial paradise, the seat of the heavenly powers, directly associated with the terrestrial paradise, the abode of primeval humanity. The scriptures distinctly recognize the existence of a celestial paradise. Thus, on the phrase, "The tree of life, which is in the paradise of my God" (Rev. 11: 7), Prof. Moses Stuart (*Com'ts in loc.*), remarks: "The tree of life is here spoken of, beyond all doubt, in reference to a *celestial* paradise; comp. Rev. xxii: 2, where it is spoken of as belonging to the *γη καινη* (*renewed earth*), as an appendage of "the abode of the blessed." Such, precisely, were the notions connected with the great Asiatic Olympus, the conceived Mount of Paradise, of which hereafter. The condition is, then, to find the locality with which tradition connected this astronomical element; a celestial with a terrestrial paradise.

It is a fact, as we shall see, that the location of Gan-Eden upon the great plateau of Pamir, according to the theory now held by many of the most reputed European critics, actually realizes every one of the conditions here laid down; and it was in following these guides to the truth that this result was first attained.

As previously intimated, until the opening of the present century, the investigations of scholars relative to man's primitive home had been productive of no result, except to render it hazardous for the reputation of any critic, even to attempt to locate the Mosaic geography of Eden. The first series of investigations in modern times, that gave some promise of success in this direction, was conducted by Col. Wilford, and published in the "*Asiatic Researches*," dating from about the year 1818.<sup>4</sup> Owing to the unreliable character of some of his authorities,

4. NOTE.—For Col. Wilford's first paper, see "On Mount Caucasus." *Asiatic Researches*, Vol. VI, pp. 455-536. Other papers were published in succeeding volumes.

this author was misled upon many points; yet he fully established certain leading facts, which served to indicate, at least, the direction in which the investigations ought to proceed. He was followed by such eminent critics as Ewald, Lassen, D'Eckstein, Burnouf, Obry, Renan, Lenormant, and others, who may be said to have settled forever the main points of the problem, as follows:

*First.* That there exists a remarkable argument respecting the primeval abode of man, between the earliest and most authentic traditions, as preserved by the two great branches of the Aryan race, that is to say, the Aryans of India and of Persia.

*Second.* That a like substantial agreement may be traced between the Aryan traditions generally, and those of the Semitic races, particularly the Hebrew account in Genesis.

*Third.* That the common point of departure, for all the peoples inheriting these traditions, was outside the countries inhabited by them at the opening of the historical epoch.

*Fourth.* All the traditions conduct to the region of the Hindu-Caucasus, or the high table-lands of Central Asia, as that from which the races of men originally departed, both before and after the deluge.<sup>5</sup>

It will be impossible, of course, in one short article, to go over the whole ground of these researches from the original sources, or even to present at length the results of previous investigations. We can refer the reader to those treatises in which all the essential facts are established, and the general theory elaborated.<sup>6</sup> The investigations of the distinguished authors cited below, all tend to the same conclusion, which is admirably stated by M. Renan, as follows:

"Thus, everything invites us to place the Eden of the Semites in the mountains of Belurtag, at the point where this chain unites with the Himalayas, towards the plateau of Pamir. . . . We are conducted to the same point, according to E. Burnouf, by the most ancient and authentic texts of the Zend-Avesta. The Hindu traditions, also, contained in the Mahabharata and the Puranas, converge to the same region. There is the true *Meru* (of the Hindus), the true *Albordj* (of the Persians), the true river Arvanda, from whence all rivers take their source, according to the Persian tradition. There, is, according to the opinions of almost all the populations of Asia, the central point of the world, the umbilic, the gate of the universe. There, is

5. For the investigations establishing these facts, the reader is referred to the various treatises to be hereafter cited.

6. Such treatises are principally the following: Obry, *Du Berceau de l'espree humaine*, pp. 1-210. Renan, *Histoire generale des langues Semetiques*, pp. 475-484, and *L'Origine du Language*, pp. 219-236. Lenormant, *Fragments Cosmogoniques de Berose*, pp. 300-333. J. Grill, *Ersväter der Menschheit*, etc., pp. 197-242. M. Senart, *Journal Asiatique*, April-May, 1874, pp. 282-302. G. Maspero, *Histoire Ancienne de L'Orient*, p. 132.

the *Uttara-Kura*, "the country of happiness," of which Mages-thenes writes. There, is, finally, the point of common attachment of the primitive geography, both of the Semitic and the Indo-European races. This coincidence is one of the most striking results to which modern criticism has conducted; and it is remarkable that it has been reached from two opposite directions at one and the same time, namely, through Aryan studies on one hand, and Semitic studies on the other."<sup>7</sup>

Referring to the same locality, and to the plateau of Pamir, M. Maspero remarks:

"There, in effect, and there alone, we find a country which satisfies all descriptions, geographically speaking, preserved in the sacred books of Asia. From the plateau of Pamir, or, better, the mountain mass, of which this region is the central plain, four great rivers take their rise, the Indus, the Helمند, the Oxus and the Jaxartes, which flow in directions the most diverse, well answering, in this respect, to the four sacred rivers of tradition."<sup>8</sup>

We have not the space here for extracts from the other authors cited, nor is this at all necessary, since they all agree upon the leading and most essential points. The Meru of the Hindus, the Albordj of the Persians, was, then, according to this theory, the first abode of man, both before and after the deluge. Since the Mount of Paradise, and the Diluvian or Arkite Mountain have been identified, critics generally agree that the *Har-Moed* of Isaiah, or "mount of the congregation," was one with Meru or Albordj; so that the Aryan and Semitic traditions were in perfect accord upon this point.<sup>9</sup> This was, in fact, the great Asiatic Olympus, of which the Greek Olympus was doubtless but a traditionary reproduction. But we notice here some striking coincidences in the conceptions of these sacred mountains.

*First.* One of the chief characteristics of the *Har-Moed* was its location "in the extreme north," for such is the proper sense of the Hebrew phrase which the translators render "in the sides of the north." This accords perfectly with the Hindu conception of Meru, which was placed also in the extreme north, inasmuch that its summit was thought to penetrate the heavens exactly in the region of the north celestial pole, termed Su-Meru by the Hindus.

*Second.* Not only for the Hindus, but for nearly all the populations of Asia, the seat of the heavenly hierarchy, the

7. *Histoire Generale*, etc., pp. 480, 481.

8. *Histoire Ancienne*, etc., p. 132.

9. On the identity of the *Har-Moed* with Meru or Albordj, see Gesenius' *Jesaja*, B. ii, s. 236; and *Hebrew Lexicon*, by Robinson. Art. *Lopy*, 2, A. Wiford, *Asiatic Researches*, vi, pp. 483, 489. Lenormant, *Fragments de Berose*, p. 318, and other eminent critics.

celestial paradise of the Gods, was precisely this region, centering in the pole-star, and penetrated by the summit of the sacred mount. The Hebrew conception of the *Har-Moed* was quite similar. The language which Isaiah puts into the mouth of the ungodly king of Babylon, is sufficient proof: "For thou hast said in thy heart, I will ascend into heaven, I will exalt my throne above the stars of God; I will sit also upon the mount of the congregation, in the sides of the north; I will ascend above the heights of the clouds; I will be like the Most High." Ch. xiv: 13, 14. Here, *El* and *Eloha*, two names of Divinity common to nearly all the Semitic races, are placed in immediate connection with the *Har-Moed*, one with the Meru of the Hindus, just as for the Hindus the seat of the heavenly powers was the summit of this sacred mountain.

*Third.* The prophetic allusion to the "stars of God" is important to be considered. The name for "God," here, is the Hebrew *El*, which is a *personal name*, just as much as *Yahveh*, or *Jehoveh*. The proper rendering, then, is "the stars of *El*," referring to a particular group of stars, instead of "the stars of God," understood of the whole starry heavens. To what particular group, then, did the expression, "the stars of *El*," refer? In nearly all the traditions relating to the great Asiatic Olympus, the Meru of the Hindus (one with the *Har-Moed* of Isaiah), the seven stars of the Great Bear, the *Septem triones* of the Romans, were directly associated with it. Indeed, as held by M. Obry, and adopted by M. Lenormant, the primitive name of Meru was *Arya-ratha*, "the chariot of the Aryas," in allusion to the seven stars of the chariot, or of the Great Dipper, which seemed to roll around the summit of this sacred mountain. Now, since "the stars of *El*" are by the prophet especially associated with the *Har-Moed*, and since, according to the general opinion of critics, the *Har-Moed* was one with the *Arya-ratha*, or Meru of the Hindus, there seems to be little doubt that "the stars of *El*" were identical with this group of seven stars, uniformly associated in tradition with the Asiatic Olympus. Thus, not only the celestial paradise, conceived to be united to the terrestrial by means of the sacred mount, but this particular group of stars, constituted the astronomical element already referred to, in the various traditions relating to the Mount of Paradise, identified with the Diluvian Mountain. As will be seen, the facts included under the three foregoing heads, afford ample confirmation of the received opinion, which identifies the *Har-Moed* with Meru or Albordj; and the agreement of the Aryan with the Semitic traditions respecting this sacred mount, is very striking.



For the support of the theory, whose chief points have been now presented, we have to depend mainly, for want of space, upon the investigations of the eminent critics whose treatises have been already cited. But there are several facts, connected with the traditions of individual nations, which demand here an especial notice, particularly as some of them have not been before brought forward in treating upon the subject of this article.

*First.* The Aryans of India and of Persia. That the Hindus and Persians regarded Meru or Albordj, as the first abode of man both before and after the deluge; and that their inherited traditions fixed the location of this sacred mountain, in the high regions of the North, or upon the plateau of Pamir, are points so well understood and so fully settled, as to render it unnecessary for us to attempt any further illustration of them. As before intimated, the Hindus and Persians located the Celestial Paradise upon the summit of this mountain, identifying it with the celestial region centering in the Pole Star. Thus the Celestial and Terrestrial Paradises were conceived to be united by the sacred mount itself, which joined the heaven and earth together like a vast column or pyramid in stages. These various notions, common to the populations of Central Asia, will be found to have prevailed extensively in Western Asia, on one hand, and in the remote East on the other.

*Second.* The Chaldæo-Assyrians, or Babylonians. In one of the inscriptions of Sargon, King of Assyria, occurs this important passage: "*Ili Ea Sin Shamas Nabu, Bin Adar va hirati-sunu rabati sa ina kirib bit-harris rab mot Satra mat aralli kinis aldu*;" The gods Hea, Sin, Shamas, Nabu, Bins, Adar, and Hien, great spouses, who are born forever in the interior of the great Bit-Kharris of the East country, and in the country of the Aralli."<sup>10</sup> Rendering this passage very nearly as above, Mr. Lenormant offers some interesting comments upon it, which we reproduce:

"This is, as we see, a luminous and celestial region, like the East, which serves as the abode of the great divinities, and of which the temples *Aralli* are the image. Such a description corresponds perfectly to the *Qaggadu* or *Bit-Sadu*; that is to say, to the culminating space of the superior hemisphere of heaven (north Celestial Pole). As to the *Bit-Kharris*, the house well built, which the passage cited represents as the palace of the gods, it is situated at the same time in the *Kurra* (*Assyr. Satra*) and in the *Aralli*; that is to say, in the East, and in the direction of the point which serves as the pivot of rotation of the superior heavens; we believe, then, that it is necessary to locate upon the summit of the Paradisiacal mountain of the

10. Botta 153, 12, l. 156. Cf. Norris' *Assyr. Dictionary*, p. 52.

North-east, which unites the heaven and earth like a column, the *Har-Moed* of Isaiah (xiv 4-20), of which we have studied already the conception."<sup>11</sup>

Abundant facts might be presented, if we had the space, proving the strict accuracy of M. Lenormant's interpretation of this passage from the text of Sargon; although various and contradictory opinions respecting it have been put forth by other Assyriologists. In the first place, we know that for nearly all the Asiatic nations, the celestial paradise, the conceived abode of the great divinities, was located precisely in the extreme northern heavens, in the region centering in the pole-star, and penetrated by the summit of the sacred mount, the Meru of the Hindus, Albordj of the Persians, the *Har-Moed* of Isaiah. Thus M. Lenormant very correctly identifies the *Bit-Kharris* and the *Aralli*, the abode of the great divinities, with this culminating space of the superior heaven, centering in the pole-star. Hence, also, the Accadian expression *Mat Kurra*, the Assyrian *Mat Satra*, must be understood here of the East, the same as *Im-Kurra*, the ordinary phrase denoting the East, considered as a cardinal point. In the passage from Sargon's inscription, the Assyrian *Bit-Kharris*, *Mat Satra* is the Accadian, *E-Kharsak Mat-Kurra*. As is well known to the Assyriologist, the meaning of *Kharsak* is "Mountain," while, *E*, Assyrian *Bit*, signifies "temple." Finally, *Mat-Kurra*, means "the east country," or, "the country of the east." We have here, even to the most minute details, an exact reproduction of the Aryan conception of Mt. Meru, or Albordj, with its accessories. Here is the abode of the Heavenly Hierarchy, located on the summit of the *Kharsak*, or sacred mount, which penetrates the heavens exactly in the region of the pole-star. As regards the *Aralli*, its reference to the abode of the dead, particularly of the sainted dead, is an undoubted fact, and it is well known that the Hindus located the abode of the blessed upon the shining slopes of Meru.

We prove here the perfect agreement of the traditions of the Semitic Assyrians and Babylonians, with those of the Aryans of India and Persia, and we have identified already with the Meru of the Hindus, the *Har-Moed* of Isaiah, and its accessory ideas.

The fact that the primitive traditions of the Assyro-Babylonians centered in the far east, or north-east, especially in this sacred mount of the east, as having been the home of a civilization prior to that of Babylon, is abundantly manifest from a careful study of the cuneiform inscriptions; but for want of space we must confine our proofs of this fact to the data already submitted. As will be seen, all this harmonizes with the Mosaic record, which traces the migration of the founders of Babylon, from the diluvian mount in the east, to the plains of Shinar.

11. Fragments de Berosé, pp. 392, 393.

*Third.* The Chinese. Heretofore, the investigations of scholars, relative to the primitive home of man, have been confined mostly to the traditions of the Indo-European and Semitic races, and very few facts have been discovered as yet, appertaining to this subject, in the traditions of Turanian races, if we except those of Babylon, the supposed authors of the cuneiform writing and early literature. But Dr. Gustave Schlegel, in his recent voluminous treatise on "Chinese Uranography," reports a curious legend of the Tortoise, the ordinary Chinese symbol of the *Kosmos*, which points unmistakably to the sacred mount of the Aryans of India and Persia. This legend proceeds thus:

"To the west of the mountain *Ques Kiao* is the lake of stars, which is a thousand Chinese *li* in length. In this lake is a divine *tortoise*, which has eight feet and six eyes. Upon its back it carries the images of the northern measure (or bushel, the seven stars of the Great Dipper), of the sun, moon, and the eight celestial regions. On its under shell it has the images of the five summits, and of the four canals." "That is to say," adds Dr. Schlegel, "upon the back of this animal is traced the celestial map, and on its belly the terrestrial."<sup>12</sup>

But these maps represent not the entire heaven and earth, but those particular celestial and terrestrial regions associated with the traditionary Mount of Paradise. This tortoise, in fact, is an image of the *Cosmos*, consisting of heaven and earth; but it is that particular, limited *Cosmos*, as known to the first men. The original reference of this legend to Mt. Meru and its accessories cannot be doubted. *First.* The northern measure, or bushel, is fully identified by the author with the group of seven stars in the Great Bear, whose uniform connection with the Sacred Mount, in tradition, has been already shown. *Second.* We have "the eight celestial regions." For the reason that the summit of the sacred mount penetrated the heavens, in the region of the pole-star, the point of intersection of the colures, the Aryan traditions uniformly associated the eight celestial regions, the four primary and the four intermediate, with the summit of this mountain. Here was, in fact, the point of generation for all these regions. *Third.* On the under shell of the cosmical tortoise was the image of the "five summits." In Hindu tradition, Mt. Meru was surrounded, in the direction of the cardinal regions, with four other abutting or supporting mountains, held in veneration almost equal to that of Meru itself. These four mountains, with Meru itself, constitute the "five summits" of the Chinese legend. *Fourth.* Finally, we have the "four canals," which relate obviously to the four sacred rivers of Paradise. This is confirmed by the statement of M.

12. *Uranographic Chinoise, etc.*, p. 61.

Obry, in allusion to a celestial sphere, "half Indian, half Chinese, which presents the four paradisiacal rivers of the Chinese . . . under the common name of *See-Tu*, 'the four canals,' a title by which the learned of China designate their four sacred rivers."<sup>13</sup> These four characteristic features of the legend of the tortoise leave no room for doubt; the Chinese had inherited the same traditions respecting the sacred mount, the conceived first abode of man, as those preserved by the Aryans of India and Persia.

*Fourth.* The Haranite Sabæans. The fact that the Aramiac populations of northern Mesopotamia, especially the Sabæans of Haran, one of the oldest cities of the world, had preserved traditions quite in accord with those already passed in review, is familiar to orientalist. The recollections of the primitive ages of man, constituting some of the most important elements of the Haranite cultus, were embodied in the so-called "Mysteries of Shemal," Hebrew *Semol*; an exhaustive investigation relative to which was published many years ago, by Prof. D. Chwolsohn, of St. Petersburg.<sup>14</sup> This ancient Semitic word *shemal*, or *semol*, appears in the cuneiform texts under the form of *su-mi-lu*, and signifies "the left," "the left hand," thence put also for the north, the north pole, corresponding thus to the Su-Meru of the Hindus. It is well known that the Haranites associated the seven stars of the chariot or dipper with the cultus of *shemal*, the pole-star, which was thus the eighth in relation to the group of seven. The facts prove, indeed, that the Haranites had preserved the traditions relating to the sacred mount of the northeast, and that the worship of *Shemal* had its origin from that locality.

*Fifth.* The Greeks and Romans. M. Lenormant calls attention to the Greek phrase *meropes anthropoi* (μέροπεσ ἄνθρωποι) employed by Homer, and he translates it, "The men issued from Meru." M. Renan had previously suggested the same rendering, and so M. H. Estienne, in his "Thesaurus" published by Didot. If this be correct, it proves that the Greeks had inherited the traditions relating to Meru. It is well known that the Romans placed the seat of the gods in the extreme north, and Hr. Nissen affords us some proof of it, in his remarks upon the Pantheon:

"The axis of the temple was fixed at only 5° westward from the pole. The seven gods of the Pantheon were the *Septem Triones*, to be compared to the seven oxen (seven stars of the Great Bear), which never disappear from the sky in their revolution round the pole. The position of the seven stars was one

13. Du Berceau, etc., p. 181.

14. See *Die Ssabier und der Ssabismus*, B. ii, ss. 319-364.

of the grounds for the location of the temple, and the reference to the seat of Jupiter in the eighth region (or Su-Meru) another."<sup>15</sup>

Here, too, we discover distinct traces of those primitive notions associated with the great Asiatic Olympus. That the ancient *Asgard* of the Norse Mythology was a conception derived originally from Meru admits of but little doubt, and it is now conceded by a large number of the best critics. We take no notice here of the Hamites of the Nile valley, for the reason that to develop the facts relative to their earliest traditions would require more space than we can afford in the present article.

We close here our brief review of the traditions inherited by the nations of the ancient world relative to the original center of populations and the primitive abode of man. We see that everywhere, almost, these traditions point to the great Asiatic Olympus, the Meru of the Hindus, as the region from whence all the races departed after the deluge; and since the Arkite and Paradisical mountains were identified, such must have been the original point of departure before the deluge.

We have now placed before the reader some of the leading facts constituting the basis of the theory, which locates the Gan-Eden of Genesis on the high table lands of Central Asia; more definitely upon the plateau of Pamir, the most elevated tract of country upon the globe, and which is properly termed by the natives of this region "the dome of the world." Geologically speaking, here, would naturally be the place, before all others, for the first appearance of man on earth, since it was obviously the first to rise above the waters of the deluge and the primordial chaos. We have not the space here to answer in detail the objections to this theory, and must refer the reader for such answers to the treatises already cited on this subject. Nor can we compress within our limits any detailed notices of the conflicting theories which have been from time to time put forth. Still, a few remarks bearing upon these points should find place here.

Perhaps the most current theory opposed to the one here presented, is the one which locates the Gan-Eden on the Middle or the Lower Euphrates. Some eminent Assyriologists have believed to find in the inscriptions very clear and positive proofs of this hypothesis, and the enumeration by Moses of the *Hiddekel* (Tigris) and *Euphrates*, among the rivers of Gan-Eden, has seemed powerfully to favor this view. But we must call to mind the universal habit of migratory races of transferring the names of rivers, mountains, etc., in the mother country to like objects in the new countries colonized by them; a habit of which New England furnishes abundant examples. Moreover, it would

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15. Das Templum, etc., p. 225.

seem from a fact stated by Rev. A. H. Sayce, that the Euphrates of our geographies, on whose banks Babylon was situated, could not have been the Euphrates to which Moses refers. The fact stated by Prof. Sayce is as follows: Two of the rivers of the Garden of Eden are expressly stated to be the Euphrates and the Tigris, under its old Accadian name Hiddekhel, and I have found *Gikhhkhan*, the exact representative of *Gihon*, given as a synonym of the Euphrates (2 R. 35, 1, 6)."<sup>16</sup> A careful examination of the texts cited seems to confirm Prof. Sayce's statement. But Gikhhkhan-Gihon is another river than the Euphrates, as named by Moses. If the original name of the Euphrates of Babylon was Gihon-Gikhhkhan, then this was not the Euphrates intended by Moses. But the great objection to the theory which locates the Gan-Eden on the Middle or Lower Euphrates is to be found in the essential conditions of the problem, as stated at the opening of the present article, namely, that the Eden of Scripture and of uniform tradition was a mountainous region, and was located around the sources of the river system, rather than at the mouth of any river. Finally, according to known facts, it is wholly improbable that the Aryans of India and Persia, the Turanians of China, etc., etc., ever departed from the valley of the Euphrates towards the countries subsequently inhabited by them. The tradition of these races, and all the known facts prove the contrary. Even the founders of Babylon, when they left the Arkite Mountains "journeyed from the east" to the land of Shinar. There is not a single condition of the problem, in fact, as previously laid down, that the theory in question realizes.

The theory which locates the Mount of Paradise and the Diluvian Mount upon the plateau of Pamir, identifying them with each other, not only accords with the earliest and uniform traditions of the ancient nations, both as to their own primitive home and that of the human race itself, but it fully accords with the Mosaic text of Genesis, according to its most obvious intent. The attempt to construe the expression "from the East" in harmony with the situation of Ararat in Armenia, nearly due north from Babylon, is only one of those strained interpretations to which many current theories subject the exegete. From the high table lands of Central Asia, as their original point of departure, it is easy to trace the various dispersions of the races over the globe, and this in harmony with their own traditions respecting their primitive abode; and this is the theory, probably, which the ethnological, linguistic, and other sciences will ultimately enforce upon the biblical exegete.

Dr. Faber very properly located Gan-Eden around the sources of the sacred rivers, and in a mountainous region, but he identi-

16. Trs. So. Bib. Arch., i., p. 300.

fied the mount of the deluge with that of Paradise, and both with Ararat, in Armenia. Here was his manifest error. As held by M. Obry and M. Lenormant, the name *Ararat* was a corruption of *Arya-rathu*, originally applied to Meru or Albordj, the true Asiatic Olympus, and central, converging point of the primitive traditions of all the Asiatic nations. The corruption of the Aryan name *Arya-ratha* into its Semitic form *Ararat*, and its later transfer and application to a mountain in Armenia, is a supposition quite probable, in view of all the known facts. It would seem, indeed, that the original name of Ararat was Mt. Masis, that of Ararat being a later application.

One point demands a brief notice before concluding the present investigation. Allusion has been made to the *Kharsak Mat Kursa* of the cuneiform texts. We notice that some eminent Assyriologists, of the English school, are inclined to locate the *Kharsak* among the mountains or highlands of Elam, directly east in relation to Babylon. We find ourselves compelled to reject this view. The passage from the text of Sargon, already cited, demonstrates, in our view, that the *Kharsak Mat Kursa* has to be identified with the great Asiatic Olympus, the Meru of the Hindus, is one with the *Har-Moed*, according to the general opinion of critics. The passage from Sargon shows that the *Kharsak* and *Aralli* were conceived as the abode of the great divinities. As before stated, for entire Asia, this seat of the heavenly powers, the celestial paradise itself, was located in the extreme northern heavens, centering in the pole-star, and penetrated by the summit of the sacred mount. Such were the notions of the Hindus, Persians, Romans, etc., and obviously of the Assyro-Babylonians. Now, it would be impossible to find a locality among the mountains of Elam with which tradition connected any such ideas. Thus, there can be no doubt, we think, that both the *Kharsak* and the *Aralli* were to be identified with the sacred mount of Aryan tradition, with whose conception, in all its details, they so fully accorded.

It would not be difficult to show, not only that this Olympus of all Asia was the first abode of man, before and after the deluge, but that it was the center of a great and noble civilization, from which, as heretofore remarked, the oldest known to history inherited their fundamental ideas and doctrines. It is obvious, we think, that the primitive cosmogony centered in this sacred mount, and so the notions of the Heaven-Father and Earth-Mother, and various other ideas fundamental in the primitive religion. But it is idle to make statements such as these, when we have no space in which to verify them. Thus, we await another opportunity.

O. D. MILLER.

NASHUA, N. H.

## BUDDHA'S FIRST SERMON.\*

This sermon presents to us, in a few short and pithy sentences, the very essence of that remarkable system of Buddhism which has had so profound an influence in the religious history of the East. It occupies among the Buddhists a position similar to that held by Christ's Sermon on the Mount. Buddha was one of the greatest and most original thinkers on moral and religious questions whom the world has yet seen. He propounded the scheme of salvation without any of the rights, the ceremonies, or creeds, or priestly powers, and without even any of the Gods whom men so love to trust. The sermon is preserved to us, in the Pali text, in the so-called Sutra of the Fountain of the Kingdom of Righteousness and is among the very oldest records of Buddhist belief. The following is a literal translation: "But the Tathagata (Buddha) has discovered a middle path which avoids these two extremes, a path which opens the eyes and bestows understanding; which leads to peace of mind, to the higher wisdom of full enlightenment,—in a word, to Nirvana. And this path is the noble eight-fold path of right views, high aims, kindly speech, upright conduct, a harmless livelihood, perseverance in well-doing, intellectual activity, and earnest thought." There are two extremes, said the Buddha, which the man who has devoted himself to the higher life ought not to follow—the habitual practice, on the one hand, of those things whose attraction depends upon the passions, and especially of sensuality (a low and pagan way of seeking gratification, unworthy, unprofitable, and fit only for the worldly-minded); and the habitual practice, on the other hand, of asceticism (or self-mortification), which is not only painful, but as unworthy and unprofitable as the other. "Birth," said the teacher, "is attended with pain;" and so are decay and desire and death. Union with the unpleasant is painful, and separation from the pleasant; and any craving that is unsatisfied is a condition of sorrow. The protest against sensuality is common to all religions and to all philosophies, and the universal existence of this form of the craving will not be disputed. Now, all this amounts, in short, to this, that wherever there are the conditions of individuality, there are the conditions of sorrow. This is the first truth—the truth about sorrow. "The cause of sorrow is the thirst or craving which causes the renewal of individual existence, is accompanied by evil, ever seeking satisfaction—now here, now there; that is to say, and is the craving either for sensual gratification, or for continued existence, or for the cessation of existence." This is the noble

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\*Library Magazine, June, 1830.



truth concerning the destruction of sorrow. The path which leads to the destruction of sorrow is this noble eightfold path alone—that is to say, right views, high aims, kindly speech, upright conduct, a harmless livelihood, perseverance in well-doing, intellectual activity, and earnest thought. This is the noble truth of the path which leads to the destruction of sorrow. Now it is the effort, the struggle necessary to maintain individuality which, according to the Buddha, is the essence of sorrow; and the conditions of this individuality are the conditions also of sorrow. To maintain itself as a separate being, the effort must be continually maintained; but the effort is pain, the pain of decay, and dies out at length in its last flicker in the pain of death. These being the conditions of sorrow, what is its cause? Its cause, says the teacher, is a strange and almost irresistible craving felt by every individual; a craving it seeks to gratify in various ways, but especially in the lust of the flesh, or the lust of life, or the attempt to escape from the consequences of its separation. With the noble eightfold path the argument begins, and with it the argument closes. It is at once the foundation and the top-stone of the stately bridge which the great teacher tried to build of the mysteries and sorrows of life. The eight divisions of the noble path contain the answers which he would give to the deepest questions that theologians have raised, as they are the descriptions, in detail, of the only salvation that in his opinion is worth contending for—this middle path of intelligent self-culture, which he declares “will open the eyes, bestow understanding, will lead to a peace of mind, to the higher wisdom, to complete enlightenment—in a word, to Nirvana.” Every one, according to the Buddha, ought to be walking along the noble path; but the entrance is narrow and the path is long. There are lions, too, in the path, and few are they who conquer all its difficulties and reach the end of it. The chief of these difficulties are ten in number, and are called the ten fetters or hindrances. These are, firstly, the delusion of self; and it is instructive to find that this is made the first of the series, the very entrance to the noble path. So long as a man is wholly occupied with himself, chasing every bauble that he vainly thinks will satisfy the cravings of his heart, there is no noble path for him. Only when his eyes have been opened to the fact that he is but a tiny part of a measureless whole, only when he begins to realize how impermanent a thing is his temporary individuality, has he even entered upon the narrow path. The second fetter is dependence on the efficacy of rites and ceremonies. No good resolutions, however firm, will lead to anything unless a man gets rid of the low, pagan and degrading error of ritualism; of the belief

that any outward acts, any priestly powers, any holy ceremonies, can afford him any assistance of any kind. The next fetter consists of bodily passions, and the fifth is ill-will towards other individuals. With this long battle against the powerful temptations of these great foes to progress, two entire stages of the path are occupied, and to have conquered them is to have reached the fruit of the third stage of the noble path. Then begins the acquisition of what is called the highest fruit, the result of the breaking of the last remaining fetters: first, the suppression of the desire for a future life with a material body; and next of the desire for a future life in an immaterial world. The next on the list are pride and self-righteousness. These are the last fetters but one to be broken; the temptations to which the most advanced are the most liable. Lastly (and the fact is again most instructive and most interesting) is placed the fetter of ignorance. When all else has been conquered this will ever remain, the thorn in the flesh of the wise and good, the last enemy and the bitterest foe of man. The eight divisions of the path show the qualities of the mind he should sedulously cultivate; so the ten fetters show the temptations he should most earnestly contend against. From the two combined, the reader will be able to gather a very accurate idea of the state of mind called in Buddhist writings, *Arahatship*, or the fruit of the noble eightfold path. It would be easy to fill pages with the awe-struck and ecstatic praise lavished in Buddhist writings on the condition of mind in which this state has been fully reached, the state of a man made perfect according to the Buddhist faith, when the noble path has been traversed and all the fetters broken; but everything that could be said is implied in the word by which this state of mind is designated, the word Nirvana. There may have been many mystic and long-drawn discussions as to whether Nirvana means the annihilation of the soul, or an eternal existence of the soul in a state of trance. It can mean neither, for the simple reason that the Buddha did not teach the existence of any soul at all in the Christian sense; and the confusion which gave rise to these varied interpretations was entirely in the minds of the interpreters. They took for granted that the *summum bonum* must be in a future life. That any one could seek for a salvation to be perfected here, on earth, did not occur to them. That the highest aim of man could be considered to consist only of an inward subjective change, during this life, was an idea so strange that it was beyond the grasp of those who were accustomed to think the highest happiness could only be obtained in heaven, when all the *outward* conditions of man's existence could be changed. When they were told, therefore, that the Buddhist salvation

was Nirvana, they not unnaturally presumed it to be some sort of future life; and in attempting to apply to a future life and to a soul, expressions used by thinkers whose system was independent of the idea of soul, they inevitably fall into those curious errors and misconceptions which make their discussions of Nirvana as wearisome as they are unreliable. To despair of the present life, thus to postpone the highest fruit of salvation to a world beyond the grave, is base, unworthy and unwise. Here and now, according to the Buddhist, we are to seek salvation, and to seek it in "right views and high aims, kindly and upright behavior, a harmless livelihood, perseverance in well-doing, intellectual activity, and earnest thought." One question remains which ought to be cleared up. Was then the Buddhist salvation, the salvation of a religion which once counted among its adherents half the human race, and which has even now more followers than the Roman church, the Greek church, and all other sects of Christians put together—was this a salvation without any reference to a God? Strange as it may seem, it was. Doubtless the doctrine would have changed, certainly its expression would have changed, had it been formulated in modern times and in the West, where the faith in one God has driven out the faith in many. But the popular gods of India—as numerous and as varied in character as their relations, the gods of Greece and Rome—it seemed to the Buddha were liable to all the evils inseparable from individuality. Their characters were such that they themselves stood in need of salvation, and to salvation the only way, for men and gods alike, was along the noble eightfold path. Hindu thinkers, indeed, before the time of Buddha had evolved a unity out of the many popular impersonations of the forces of nature, had postulated under various names a primeval being of whom all the other gods, and all men and all matter, were but the sportive and temporary manifestations. But this belief was still confined to the schools, and the Buddha denied the cogency of the arguments by which it was supported. He only regarded the newer and purer divinities, born of Hindu philosophy, as more well-meaning and more powerful than the gods of the multitude. But they were alike liable to error, dazed with the delusion of individuality, and in need of salvation; and the Arahāt, the man who had reached Nirvana here on earth, was, in spite of his lesser material advantages, in spite of his less favorable outward conditions, better, and wiser and greater than they. This was one of the most important tenets of early Buddhism, and very fairly represents the position which the gods have always occupied in the varying creeds of Buddhist believers. We find it not only in the earlier books, but in later and popular represen-

tations of Buddhist belief. It shows us that in India, as elsewhere, after the belief in many gods had given rise to the belief in one, there arose a school to whom theological questions had lost their interest, and who sought for a new solution of the question to which theology had given inconsistent answers in a new system in which man was to work out his own salvation. In this respect the resemblance, which Mr. Frederick Pollock has pointed out, between Nirvana and the teaching of the stoics, has a peculiar interest; and their place in the progress of thought may help us to understand how it is that there is so much in common between the agnostic philosopher of India and some of the newest schools in France, in Germany, and among ourselves.

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### EDITORIAL.

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#### BUDDHISM AND CHRISTIANITY.

The extract given above, containing some of the essential principles of the Buddhist religion, is one to which we would call attention. It is probable that no more favorable view of this mysterious early faith has ever been written. It bears the same relation to prose that the "Light of Asia," by Edwin Arnold, does to poetry, both throwing a remarkable glow and beauty over the faith of this religious founder. There is, however, another side, and we are happy to call attention to some thoughts which may have been expressed by others, but which are important.

Though Buddhism may be considered the highest and the best of the non-Christian religions, it certainly is far from being satisfactory to the moral sense or spiritual demands of any enlightened being. It is, as its most ardent admirers must admit, a religion without a God. It denies the existence of the soul and holds forth annihilation as the highest blessedness and as the final issue of all the religious struggles of mankind. Surely it is too much to believe that such a religion can be adapted to the wants of any creature which has a soul or a single longing for an immortality or an existence after death. To the atheist and to the skeptic who would banish all religious sensibility from his nature and would reduce all moral effort to a cold and critical self-culture such a creed may seem attractive, but certainly to no one who has had the least experience, or even knowledge, of the Christian's faith could it for a moment prove satisfactory as a substitute for that blessed religion. There may indeed be one lesson learned from the various presentations of the

tenets of this the chief religious teacher of the East, and that is, that the salvation to be sought for, both by the heathen and the Christian, is a salvation which is to find its realization in this life as well as in the next. This is the chief attraction of the Buddhist faith, this the end of the so-called "noble path." Practically, however, we believe that the Christian's faith is the surest, if not the only one, which will enable one to deny the passions, overcome the sorrows of his own heart and yet keep alive the noblest and best aspirations of his nature.

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#### GRIMM'S LAW.

This law relates to the change of consonants: a certain consonant in Greek becomes another in English, while it is still produced by the same organs of speech, and in high German still another. There are three classes of consonants subject to interchange: labials, dentals, and gutturals. Each one of these contains three consonants, f, b and p, th, d and t, and h, g and k. These consonants pass into one another. That which is merely aspirate in Greek and Latin, becomes soft in English, and hard in the old high German, f becoming b, and b, p. The dental series th in Greek and Latin becomes d in English and t in German. In the guttural series h in the Latin and Greek becomes g in English and k in German. Thus we have the Latin *fagus* becoming buch, and in high German *puoche*; also, *dico* becomes teach in English and *zigi* in high German. *Tego* in English is thatch, and in old high German, *dwechan*.

The last number of the *Journal of Philology* has an article on some applications of this law which is quite interesting. It appears that the late Prof. Murray had come almost to discard the law, and to doubt almost the discovery, and the author of this article says, that the uniqueness of it has been made more prominent than there is ground for.

Mr. Douse, in "Grimm's Law; a Study—London, 1876," has as we understand, carried the law of Phonetic changes so far as to bring doubt upon the law itself. The attempt has been made to explain the changes, the mutes in the different Indo-European languages, such as the Classical, the old Teutonic and the High German—and some have imagined that they could find the missing link by which to bridge over the chasm between the sounds. It has been imagined, too, that the circular movement existed, the sonants shifting to surds, the surds to aspirates and the aspirates to sonants again. Mr. Brandt, the author of the article, thinks that the shifting is not circular, but believes that shifting of one consonant to another or the unvoicing of sonants and the changing of the point-stop *d*, voiced to

the point-stop voiceless *t*, and other operations of the law may be ascribed to a variety of causes. Doubtless the influence of the earlier inhabitants of Germany may, as Dr. Murray suggests, be thus recognized, and so the discussion of this question comes properly under the province of ethnology, and should be studied in the light of the ethnological changes and characteristics.

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#### ANCIENT ARMOR.

An interesting collection of ancient helmets and other armor was open to the inspection of visitors at the rooms of the Royal Archæological Institute, in London, during June. The articles exhibited were 250 in number and ranged from the tenth century before Christ down to the reign of the Stuarts of England.

There were several specimens of Etruscan and Grecian art, and still more of Roman and Oriental workmanship. Of these the most interesting were a brazen helmet of the time of the Roman occupation of Great Britain, a Persian helmet of the seventeenth century, four Etruscan helmets of bronze and another found in the Tigris, near the supposed passage of the "Ten Thousand." Three of the Etruscan helmets have the additional interest that they were bought at the sale of the effects of the poet Rogers, and the fourth, of bronze, was found in the bed of the Ilyssus, at Athens.

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#### A BEAUTIFUL EPIGRAM OF THE EMPEROR AUGUSTUS.

Prof. Dr. Hagen has discovered\* in a Bernese manuscript of the tenth century a hitherto unknown epigram of Augustus Cæsar. The greater part of it is written in ancient stenographic characters or Tironian notes, and runs as follows:

"OCTAVIANI AUGUSTI.

"Convivæ! tetricas hodie secludite curas  
Ne maculent niveum nubila corda diem!  
Omnia sollicitæ pellantur murmura mentis,  
Ut vocet indomitum pectus amicitia  
Non semper gaudere licet; fugit hora, jocemur!  
Difficile est Fatis subripuisse diem."

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#### NEW DISCOVERIES.

Cumberland and Westmoreland Counties, England, have been the scene of interesting archæological discoveries. Mr. R. S. Ferguson, A. M., gives a report of two or three curious cists containing skeletons, with the vessels for food, as usual, by their side, and with implements, pottery of a rude type and other cinerary remains. Another cist contained sundry implements of the bronze period.

A Roman camp situated on the sea coast, near Mayport, revealed a mutilated inscription of the twentieth Roman legion and the foundations of a Roman road. Coins of the reigns of Constantine and of the later Roman empires, with a large hoard of other coins, have been accidentally discovered by a laborer on the banks of the river, near Bristol.

The Malvern Hills have also revealed a number of ancient camps. In the interior of these camps were lines of hollows which were used as habitations. The camp was surrounded by a ditch and rampart. It is the opinion of Mr. C. H. Price that this camp was of Celtic origin, though there are remains of the British tribes among the debris.

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### ARCHÆOLOGICAL NOTES.

#### MUSEUMS.\*

The British Museum has received five boxes of antiquities from Babylon, the result of late excavations. Amongst them are additions to the legend of the creation. Amongst the recent arrivals are some tablets containing the names Kandalanu and Nabonastir (the Kinneladanos and Nabonassar of the Canon of Ptolemy), the last the celebrated monarch of the era dating from B. C. 747. The same museum has purchased a vaulted wooden coffin, well preserved, and a gilded mask and mummy of a lady named Tahutisa or Thoths, one of the court or family of the queen of Amosis I., of the eighteenth dynasty.

The museum at Boolak, near Cairo, has the finest Egyptian collection in the world. It has been repaired and re-decorated. Mariette Bey, who has been raised to the rank of a Pasha, has been engaged in re-arranging its contents. It is said, however, that about 100 scarabs have been recently stolen from it, and the suspicion is, considering the archæological value of such articles, that some educated men may have committed the theft.

The Museo Tiberio, recently built in the Botanical Gardens at Rome, is to contain all the objects of art found in and along the banks of the Tiber. The conservatory of the gardens has been turned into a gallery to hold the fine frescoes lately discovered in Farnesoria.

The collection of Egyptian antiquities of M. Allemand, comprising 156 bronzes of animals, 131 ceramic statuettes and a number of other objects, is to be bought by the city of Antwerp at the price of 20,000 francs.

The Museum Torlonio, Rome, is for sale; price, ten millions of dollars. It is extraordinarily rich in antiques.

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\*We are indebted to the *American Art Review* for many of the facts concerning Museums.

The Imperial Museum at Constantinople. Rev. A. H. Sayce describes in the *Academy* of September 20, 1879, the antiquities in the museum at Constantinople, consisting of objects from Cyprus, including the large stone figure found by Gen. Cesnola at Amathus; also the gold plates discovered by Dr. Schliemann at Hissarlik, archaic Greek figures, and a charming male figure in bas-relief from Pella, in Macedonia. Of great interest are a series of sculptures from Durfur, which, according to Mr. Sayce, remind one of Mexican art.

A collection of Parisian monuments and antiquities, the greater part of which have been unearthed in the course of excavations in the soil of old Paris, has been opened in the Hotel Carnavalet.

The dispersion of the collection in the India museum has finally been decided upon. The British Museum will receive the series of Buddhist sculptures, thus affording immediate comparison with the remains of Assyrian, Egyptian and classic sculpture. Casts of these sculptures will be made for the South Kensington Museum.

The Peabody Museum of Archæology and Ethnology is now open for visitors, and is remarkable for the fullness of its collections in American relics. Among these are a series of articles from Utah, Arizona, Colorado and New Mexico. Models of the cliff houses and the ruined Pueblos are exhibited. It contains relics from caves, consisting of pottery, bark, cloth, braided shoes and other articles. There are also implements of copper, pipes and other articles of stone from mounds in Ohio and Michigan, and that peculiar pottery from the mounds of Missouri and Illinois, and a very large collection of articles from the graves of the Cumberland Valley. The collection of pottery and relics from Central America and Mexico is also very instructing.

The Peabody Institute at Baltimore has lately received from London thirty-eight casts of antiques, including the Parthenon sculptures. The Parthenon Freize occupies the wall of the North Gallery and extends nearly around it.

Mr. Edward Atkinson has lately received from Bombay a present of nearly two hundred statuettes designed to represent the costumes of the different castes and classes of the people of India. These will be deposited in the Art Museum at Boston.

Among the trophies brought back by Prof. Stephenson, of the Hayden survey, from New Mexico to the Smithsonian Institution, are two idols, or gods, finely chiselled and looking like Egyptian specimens. These were probably brought into



the country by the Spaniards. Many specimens of pottery were also exhumed which bear resemblances to the pottery found in the ancient ruins of the Old World. Buried towns and cities are numerous in New Mexico and the relics of a former civilization are apparently inexhaustible.

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#### THE NORTHMEN, AND THE EARLY CONDITION OF SOCIETY IN EUROPE.\*

Of the condition of the Northmen at the time of their first settlement, we can assert nothing. We do not know whether they had already passed out of the hunter stage and become a pastoral people, nor can we mark the date at which this condition was abandoned for the more fixed one which marks the use of the agricultural system. The analogy of all other tribes of which we have any historical evidence, would lead us to suppose that they had at some time passed through these stages. But when we first met with them they had certainly become an agricultural people, and dwelt in settled homes. The origin of society amongst the Northmen, in common with the rest of the Germanic people, is probably to be sought in the village community, an association founded on the real or fictitious tie of the family. According to the system, the district occupied by each community was the common possession of the family or tribe; in what the absolute ownership resided, and was divided into three parts: the village, the farm land, and the common pasture. In the village each of the tribal leaders had his homestead. Of the lands he had a right to a share, but he had to follow a prescribed rotation in his crops. On the pasture lands, he might turn out his cattle, cut his fire-wood, and when they were taken up for hay each marksman would have his hay field. Thus the tribesman was the tenant rather than the owner, and individual proprietorship, as we have it, was unknown. Each village community would have its assembly, in which every free marksman enjoyed a right to sit, and here the petty laws which regulated the self-governing body would be passed. This state of things, however, soon passed away. The improvement of agriculture, and with the rise of separate ownership, inequality of estate, grew up. Thus, by the eighth century, the mark system had at last disappeared.

In the religion or mythology of the Norsemen, their character and peculiar views of life have received a proper embodiment, containing much of the spirit of obedience, and much loyalty to the right. The gods were worshipped partly in the open air in groves or places encompassed by a circle of big stones, partly in

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\*Extract from Hist. of Scandinavia, by Paul C. Limling.

wooden temples, among which that in Upsala was most famous. The public worship was in general administered by the head of the family; at the temple, priests were appointed sometimes; also, priestesses. The usual victims were horses, oxen, young swine, hawks and cocks. Sometimes even *men* were offered, mostly slaves and prisoners of war, for the Norsemen, in their uncultivated state were, in a manner, cannibals. With these barbarous people the number nine was supposed to have something in it of peculiar sanctity.

The Norsemen had some peculiar letters, consisting of sixteen marks or characters called Runes, the origin of which descends to the remotest antiquity. The signification of the word Rune, mystery, serves to allude to the fact that originally only a few knew the use of these marks, and they were mostly applied to charms, witchcraft and enchantments. They were both plain and artificial; with the latter, called Louremes (Lou denoting secret), a great superstition was connected: the priests believing that they were able by aid of them to dull weapons, to stop thunder and hurricanes, and cure diseases. When engraved on nails, wrists, rudders of ships, handles of swords, they were supposed to bring good success and avert danger. The Runes were used as communications in writing, being engraved on their wooden tablets, which were sent away as letters, or being used as the records of kings, genealogical tablets, and the like. Inscriptions on stones were used to preserve the memory of celebrated men, or of noted events. The most remarkable of these Rune stones were the Jellystones in Southern Jutland.

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#### THE EDDAS.\*

"After a long silence Professor Müllenhoff has resumed his publications on the subject of German mythology in the *Zeitschrift für deutsches Alterthum*, in an article of sixty pages on 'Sigfrid's Ahnen.' It is the first of a projected series on the *Nibelungen-sage*, and aims at defending the integrity and *Ursprünglichkeit* of the sage against the recent destructive criticism of Symons, in Paul u. Braune's '*Beiträge*' (iii 200-303). Any résumé, however brief, of such an article would far exceed our limits. The author's reputation as an investigator is so high that no utterance of his will fail to receive careful attention. So far as we are competent to pronounce an opinion, we must think that Symons and Müllenhoff are both correct in principle; the former in maintaining that the component parts of the Eddas are of very unequal value, and that the present office of the Edda-scholar is to ascertain with reasonable precision the several degrees of *Ursprünglichkeit*; the latter in claiming for the Sigfrid-sage in particular the highest antiquity and a dis-

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\*Extract from *The Nation*.

tinctively German (*i. e.* Continental) origin. Müllenhoff's article discusses with singular acuteness a number of the knottiest points in the *Heldensage*, and is unquestionably the most valuable essay that has appeared for many years.

"Even since the above was written we have received additional evidence of the danger of trusting too much to the Eddas. In a recent number of the *Academy* (Nov. 29) Mr. Sweet gives an extract of Bugge's recent paper on the composition of the Eddas. Prof. Bugge holds that the greater part of them is not of common German origin at all, but borrowed through the English-Celts from Greco-Roman or Jewish-Christian sources. Thus, the Baldermyth, usually regarded as the bright peculiar flower of Scandinavian mythology, is, according to Bugge, a curiously modified version of the Greek Paris-legend. A. Bang, also, maintains that the *Völuspa*, instead of being the most archaic embodiment of German belief, is only an adaptation of the Latin pseudo-Sibylline prophecies. It is evident that we shall probably have to reconstruct our entire system of Germanic mythology."

#### OUR EXCHANGES.

REVUE CRITIQUE D'HISTOIRE ET DE LITTÉRATURE.—Paris, Ernest Leroux, Éditeur.

This valuable weekly review contains among its literary and historical notices many items of great interest to the archæologist as well as to the literary man. The notices of books on Oriental and archæological subjects are especially valuable, as they give very complete information as to the publications on these subjects which appear in France and other European countries.

MATÉRIAUX POUR L'HISTOIRE PRIMITIVE ET NATURELLE DE L'HOMME: Dirigée par M. Emile Cartailhac. Paris: Ch. Reinwald, Libraire.

The interest taken in the primitive and natural history of the human race must certainly be greater in France than in this country, or no such elaborate and expensively prepared magazine devoted to these specialties, as this is, could be supported. The cuts alone descriptive of the various curious relics of copper, stone, and in some cases of iron, are very expensive. The forty-eight pages of letter press, making 550 pages in the volume, must have involved a large amount of time and labor.

It is one of the most complete magazines on archæology in the world. We take pleasure in recommending it to our readers.

THE JOURNAL OF PHILOLOGY: Edited by W. A. Wright, M. A., Ingram Bywater, M. A., and Henry Jackson, M. A. London: McMillain & Co., 1879. Vol. VIII.

The number before us contains about 160 pages of solid reading mainly on classical philology. One article is on "Tone and other Characteristics of Chinese," and another on "The Genuineness of the Sophist of Plato and some of its Philosophical Bearings." The latter article is especially interesting, maintaining that Plato designed his work as a critique of the doctrine of three existing schools of philosophy in Greece, namely, the Eleatic, the Megaric and the Cynic, and showing the various issues of thought which prevailed in Plato's time.

It is refreshing to find in a strictly philological work these oases of thought. The general reader is certainly much more interested in the philosophy of scholars than in the logomachy of the professional linguists, and it is reasonable to suppose that the linguists themselves are ultimately to reach the thought of the writers and that the technicalities of their pursuits are only a means to this end. The picture of ancient times portrayed by words and relics is growing more and more complete, so that we welcome

the philological journals as most efficient collaborators in the archæological field, or rather are glad to be welcomed ourselves to that field. So manly and strong a journal is certainly to us a welcome *exchange*.

THE AMERICAN JOURNAL OF PHILOLOGY, VOL. I, No. 2: Edited by Basil L. Gildersleeve. Baltimore, May, 1880.

Journals of philology are common in Europe, but like other specialties have not heretofore received much support in this country. This magazine starts well. Each number, about 120 pages of finely printed matter, is fully up to the standard of European journals both in contributions and in editorial management.

This number contains, among other articles on specific points in philology, one on the more general subject of "Grimm's Law" and its applications. Among the book reviews we notice one of Garrick Mallory's "Introduction to the Study of Sign Language," by C. H. Toy. The number also contains thirty pages devoted to "Reports," which means a digest of the reports of philological societies, museums and other societies.

Prof. Gildersleeve, the editor, is spending several months in Europe and the editorial work is now done by Prof. Chas. D. Morris, of the same University.

THE AMERICAN ART REVIEW: A Journal Devoted to the Practice, Theory, History and Archæology of Art. Boston, New York, Chicago: Estes & Lauriat. Edited by S. R. Koehler, Wm. C. Prime, LL. D., and Chas. C. Perkins.

This is a charming work and seems to have a distinctive field. It enters into the work which is done in Europe by the *Portfolio*, the *Gazette des Beaux Arts* and the *Zeitschrift für Bildende Kunst*. The design seems to be to cultivate the art taste and direct the enthusiasm for art in this country so that cultivated people may keep pace with the times and intelligently employ their time and money in these gratifying pursuits.

The magazine is devoted to no school, but makes a specialty of the history and archæology of art on this continent, and at the same time gives a great amount and variety of information concerning ancient mediæval and modern art in Europe and the Eastern continents. Especial attention seems to be given to etching, and each number contains two or more full page portraits or landscape pictures by prominent American etchers. Modern wood engraving, which has reached such wonderful completion, also receives marked attention. Such wood and steel-plate engravings as have been employed have shown a judicious selection and excellent taste. One of the most remarkable things about the book is that the engravings are generally made to suit the letter press rather than the letter press to suit the engravings. The only way that any education in art can ever be properly given is, in our opinion, to allow the hand to be governed by the head rather than the thought to be governed by the art. The eye may educate the taste, but it does not develop ideas. Hence the value of good material on the history, the archæology, and the theory and practice of art in all its departments. We are glad to see this new venture which seems to indicate so much confidence in the culture and correct taste of the American people, and we welcome the magazine to our exchange list with a great deal of pleasure.

PROCEEDINGS OF THE DAVENPORT ACADEMY OF NATURAL SCIENCES: Vol. II, Part II. Davenport, Iowa: J. Duncan Putnam, 1880.

This report is a marvel of science. Such progress in a little academy of science in an inland western town is indeed wonderful. Without means, except such as the enthusiasm of the members could collect and without prestige of great names or the reputation of any of its members, the society has kept diligently at work until now its report fills a volume, which for size, and for specific information, equals any report published on the continent. What is remarkable about this report is that it is filled largely with archæological subjects. The field which the academy occupies is to be sure one very favourable for such researches, it being the centre of the great territory of the mound builders, and abundant opportunity is at hand for exploration.

That the work of excavating and searching for the contents of these mounds has been diligently pursued is evident from this report, as there are no less than fifteen descriptions of mounds and mound explorations in this one volume. The only fault that could be found with the work is the absence of any general and thorough topographical survey. This neglect

we consider a very serious fault, as there is far more to be learned as to the tribal peculiarities, religious views and general habits of the mound builders from an intelligent study of the works in their topographical surroundings, than from the collection of all their relics combined. But the academy has done a grand good work, both in collecting and exploring and we congratulate the members on finding a publisher who is willing to devote so much time and money to the interests of so progressive and hopeful an institution. We personally know that Mr. J. D. Putnam, the former corresponding secretary, has expended much more money in this work than he will receive back, but such are the men, and women too, who lay the foundations for the future.

THE JOURNAL OF THE CINCINNATI SOCIETY OF NATURAL HISTORY: April, 1890. Cincinnati: James Barclay, Printer.

The Cincinnati Society of Natural History has been in active operation for several years. Occupying a field peculiarly favorable for geological investigation, the work has been mainly in the direction of geology, together with conchology and botany. Within two or three years the activities of some of the members have been directed to the investigation of prehistoric tokens, and this report abounds with results in that department, twenty-eight pages out of sixty-eight being devoted to the account of explorations near Madisonville, Ohio. This report has already been given to the public in a condensed form in Prof. J. T. Short's volume on the North Americans of antiquity, but as here given is much more complete. It is attended with twenty-one wood cuts and ten full page lithographs picturing the various pipes, specimens of pottery, skeletons and skulls which were discovered in the mounds and ancient burying places of this vicinity.

The region about Cincinnati is prolific in Mound Builders' relics. No city in the Union furnishes such an abundance of relics, and some very large private cabinets have been collected beside the very considerable collections which are exhibited in the society's rooms. The intelligent gentlemen who are residents of this vicinity seem to be alive to the importance of a proper study of the subject and hence the scientific circle at Madisonville from whence this report comes. We congratulate these gentlemen on their success.

TWELFTH AND THIRTEENTH ANNUAL REPORTS OF THE TRUSTEES OF THE PEABODY MUSEUM, ETC.: Vol. II, Nos. 3 and 4. Cambridge, 1890.

This volume includes, beside the report of the curator and the list of additions to the museum and library during the year 1878-1879, several articles contributed by gentlemen who are scattered through various parts of the United States. One of these is by Lucien Carr upon measurements of crania from California; another on flint chips, by C. C. Abbott, gives an account of certain open air workshops where the ancient inhabitants preceding the Indians manufactured their arrow-heads; a third article by Paul Schumacher on the method of manufacturing pottery among the Indians of Southern California. Elmer R. Reynolds gives an account of aboriginal soapstone quarries in the District of Columbia, and Hon. Lewis H. Morgan describes an ancient stone Pueblo on the Animas River, in New Mexico. An article follows which occupies about one hundred and fifty pages on the social organization and mode of government of the ancient Mexicans, by Ad. F. Bandelier. The latter is one of a series of articles on ancient Mexico and seems more suitable for a Smithsonian contribution than for a museum report, but is very valuable to American scholars.

The report fills a ponderous volume of 775 pages and is a valuable addition to the literature of archæology, especially as it gives the results of latest investigations and study on the American continent.

BULLETTINO DELLA COMMISSIONE ARCHEOLOGICA COMUNALE DI ROMA: Anno VIII, Serie Seconda. Roma, 1890.

This report contains first "Corpus Inscripteum Latinarum," seventy-three pages, by Sig. Rodolfo Lauriani, and second, "Anfora Aramaica del Castro Pretorio," by Prof. Enrie Fabiano, a photograph page and two folded plates illustrating the latter article.

*The Popular Science Monthly* for March, April, May and June.

The following articles are worthy of attention: The Dolmens in Japan, by Prof. Edw'd S. Morse. Prehistoric Ruins in Southern Colorado, by Henry Gannett. The Textile Plants of the World. Size of Brain and

**Size of Body. Climate and Complexion. The Crossing of Human Races,** by A. De Quatrefages. Recent Geographical Explorations. Views of Primitive Marriage. The last two are especially valuable.

*The Naturalist.* This magazine has always valuable notes on anthropology and archaeology from that scholarly gentleman, Prof. O. T. Mason. The July number has also an article on the use of fertilizers by the American Indians, which has considerable interest to our readers. Several articles on the modern doctrine of evolution have appeared in late numbers, from the pens of Prof. Cope, F. S. Lippincott, and others.

*Kansas City Review.* The miscellaneous but scholarly character of this magazine continues. It is delightful to know that amid the activities of a new country so many find time to pursue special studies, and to wield scholarly pens. Such men as Judge West, A. H. Thompson, G. C. Brodhead, A. L. Child, and others, are valuable anywhere, and especially so, so near our western frontiers.

There is no doubt that the existence of this journal gives encouragement to the pursuits to which these gentlemen are devoted, and that the societies of that region are better known by the means, and yet we are grateful for their faithful adherence to our own journal through the two years of its existence. The friendly cooperation of the *Review* has been a source of encouragement also.

The *North American Review* for July has an article on the Exodus of Israel, by Pres't S. C. Bartlett. The position of the writer may be understood by the following extracts. Modern scholarship is learning more and more the lesson of respect for the narrative of the Pentateuch. The contrast between the flippancy of Von Bohlen and his contemporaries, and the considerate deference of Lepsius, Brugsch, Birch and Poole, is instructive. One result already reached has been to assert the substantial contemporaneity of the narrative of the exodus with the transaction. The substantial fact of the expedition is no more to be questioned than the Norman conquest. We not only find this transaction imbedded in the tradition of Egypt, but we can now approximately connect it with its monumental history, as well as with the geography of Egypt. The period now commonly assigned to the Exodus is the reign of Menephta, son of Rameses II. The general locality of Israel is well settled. Herr Brugsch's departure from his own former view, locating Rameses at San, is not necessitated by any discovery he has made. Just south of Suez, are found all the requisites of the scripture narrative.

The *National Repository* contains several articles on Raphael, illustrated with wood-cuts illustrating his masterpieces. The June number has an illustrated article on the Lenox Library, and one on Oriental Weddings. The notes on art and archaeology in this journal are generally discriminating and instructive.

*Potter's Monthly* for April has an illustrated article on the Land of the Montezumas. For May, one on the Land of the Iliad, by F. Myron Colby, with cuts of Ancient Sardis Plain of the Troad, the Greek and Trojans, Alexander the Great, Helen and Paris, site of ancient Troy, Philadelphia near the Troad, Modern Pergamus, &c.; and for July a valuable contribution by George Bancroft Griffith, on Cathedrals, illustrated by cuts of Trajan's column, the Pantheon at Rome, interior of St. John's, Vatican at Rome, Leaning Tower at Pisa, Antwerp Cathedral, and old St. Paul's, London.

The *Archæological Institute of America First Annual Report.* This Society was formed for the purpose of promoting Archæological investigation, both in historic and prehistoric fields. Life membership, \$100; Annual, \$10.

The *Magazine of American History* for April, contains an article on the Pawnee Indians, their History and Ethnology, by John H. Dunbar; also the No. for March contains one on the Mound Builders, by R. S. Robertson, an article which was read before the Congres de Americanistes, at its second session, in Luxembourg.

*Proceedings of the Boston Society of Natural History.* Vol. XX, Part II, contains Traces of the Mediterranean Nations in the Northern Ocean, by Dr. Kneeland; *e. g.*, stockings, containing Spanish patterns; flagree silver work, such as was made in Genoa; the Phrygian caps of the Icelandic students, similar to the head gear found in Greece.

*The Transactions of the Academy of Science of St. Louis.* Vol. IV, No. I, contains a paper on the Geological and Geographical Distribution of the Human Race, by Nathaniel Hernes; a vocabulary of the Zayne language of Chupas, Mexico, by Ada C. G. Collins; and an article on Egyptian theology, by Prof. G. Seyffurth, D. D., illustrated with Egyptian pictographs. This author opposes the "champollionist" method of deciphering Egyptian, and proposes one of his own.

At a meeting of the *Boston Society of Natural History* in October, 1879, Prof. F. W. Putnam reported the discovery of chambered vaults in mounds in Missouri, resembling the Dolmens of Europe, with passage ways several feet in length and two in width, leading from the southern side, and opening on the edge of the mound. The walls were similar to those described by Prof. Osborne in this No. of the *ANTIQUARIAN*. Such structures are very rare on this continent.

The *New Englander* for May has an article on work and leisure, by Ernest Curtius, being a translation of an oration delivered on the birthday of the Emperor William, March 22, 1875—an article illustrated by many allusions to the customs of various nations, and abounding with many suggestive thoughts.

The *Canadian Naturalist*, Vol. IX, No. 4, has a second article on the origin of some American Indian tribes, by John Campbell, M. A. The position of Mr. Campbell is that the Algonquins and the Iroquois were derived from Asiatic races, and that the Malay and Mongolian forms of speech, roots, suffixes, affixes, etc., can still be recognized in the vocabularies of the different tribes.

The *Penn Monthly* for June reviews the controversy which has been going on over Mr. Morgan's classificatory system of relationships, contained in the *Smithsonian Contributions for Knowledge*, Vol. XV. The author of the article, Wm. F. Allen, defends this system from the attacks made by Mr. McLennan, the English ethnologist, which appeared in that author's work, entitled "Studies in Ancient History." Mr. Morgan takes as his starting point the gens, an organism which he finds universal among mankind, and cites the cases of nations as remote as the North American Indians and the Aztecs, and the Romans of early classic history. Mr. McLennan ignores the gens, but recognizes one fact held by Mr. Morgan, and that is the prevalence of exogamy. The custom of marrying outside of one's own tribe, Mr. Morgan maintains, did not exist, but that of exogamy, as related to the gens, he believes is of universal observance. Mr. Morgan's theory is certainly borne out by the facts, as ascertained among the native tribes of America, though it is possible the two authors may differ more in their definition of what constitutes the tribal relationship than in the existence of this custom. It is hopeful for the progress of Mr. Morgan's theory that all the prehistoric races, especially of the Mound Builders, as well as of the living native tribes, go to prove the existence of an extensive clan or gens system.

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## BOOK REVIEWS.

THE TRUE STORY OF THE EXODUS OF ISRAEL, AND THE HISTORY OF MONUMENTAL EGYPT, compiled from the work of Dr. Henry Brugsch Bey, by Francis H. Underwood. Boston; Lee & Shepard, 1880.

BRUGSCH'S "Egypt under the Pharaohs" is a scholarly work, based on the decipherment of the monuments. It contains the translations of many remarkable inscriptions, and is accompanied with maps and plates, but it is somewhat expensive. This abridgment gives the gist of the two volumes, in the condensed form of a single 12mo. volume of 236 pages. The abridgment is, for the general reader, as good as the original. It contains just those passages which a careful reader would be likely to mark, and saves the trouble of reading through much learned but cumbersome matter.

The style of the author in the original is very uneven, sometimes crowded with specific dates, hard names and dry facts, then giving way to a flight of rhetoric. In this respect the abridgment is somewhat an improvement; the peculiarities of the original are somewhat toned down by the transposition.

The volume however contains much of the technical language and information of a professional Egyptologist, and for this reason is not quite as readable as a compilation of the same facts would be, yet it is probable that the volume would be prized more highly because it is an abridgment and not a compilation.

Mr. Brugsch's book has very great value to Bible students, especially as there is that constant outcropping of the underlying strata of Bible facts amid the accumulations of monumental history, which is absolutely surprising. There are those who do not like this confirmation of Scripture from the testimony of the monuments. It would not be strange, too, if Brugsch should be attacked on both sides—by Bible students because he differs from the accepted views as to the place where the Israelites dwelt, and the route which they took, and by skeptics, because he has presumed to recognize the Bible at all, in his investigations.

The Israelites were certainly in Egypt, whatever route they took in their Exodus from Egypt, and it is refreshing to know that Egyptologists recognize the fact, even if they differ as to some points, especially in their way of explaining the miracle of the crossing the Red Sea.

It is probable that this volume will be extensively read, and we congratulate the publishers on the success which doubtless awaits them in their effort to bring these facts of ancient history into an available form for the reading public.

PRE-ADAMITES, OR, A DEMONSTRATION OF MAN'S EXISTENCE BEFORE ADAM. \* \* By Alexander Winchell, LL. D. Chicago: S. C. Griggs & Co., 1880.

To reconcile the Scripture account of the history of man, and the recent discoveries of science concerning prehistoric man, different authors have given several theories.

One, advanced by McCausland, is that the Bible represents only the particular race who were the worshippers of the one God, and to whom revelation was given. Another, by Dr. Tayler Lewis, is that a cataclysm occurred before Adam's creation, by which all mankind was destroyed, and that a new race was created. The theory advanced by Prof. Winchell is that the race was developed from former existing species, but that the white race is the one mentioned by the Bible, while other races existed, which were pre-Adamic.

Prof. Winchell's theory is carried out much more completely than either of the preceding, and is sustained by a remarkable array of facts, in the geography, history, chronology and ethnology of the ancient races, drawn from the Bible, and from books of ancient history. One argument is that many existing races show in their craniology, physiology and psychology, that they differ from the white race and were pre-Adamic, or were in existence before the flood, and survived that event, which was only local in its effects.

The white race included the Hamitic, including also the Egyptian and Nubian; the Semitic, including Chaldean and Hebrew; and the Japhetic, including Median, Hellenic, Scythian, Hindoo. The genealogy of the race was: *First*, from the pre-Australians, a black race. *Second*, Hottentots. *Third*, Papuans. *Fourth*, Malayoids to Dravidians, then Adamites, or Mediterraneans, and so to the Hamites, Semites and Japhites. The author says: "I have assumed the possibility that the *brown* races are Adamic, though I have indicated a leaning toward the opposite view."

These attempts to reconcile science and revelation are hopeful, even if they are mainly tentative rather than conclusive, for, like the suppositions of geologists in regard to the creative days, they show the conviction that there is harmony rather than conflict between the two records.

Through the kindness of Dr. Eb. Schrader, of Berlin, we received several recent publications from his pen, all of them quite important, and some of them indispensable, to the Assyriologist. For the benefit of those especially interested in Assyrian studies, we give here brief notices of these works:



1st. G. Halevy. *Critical Researches upon the Origin of the Babylonian Civilization.*<sup>1</sup>

In the *Journal Asiatique* of 1874 and 1876, appeared two critical papers from the pen of M. G. Halevy, the aim of the writer being to show that the assumed Turanian population and language of Babylon were mere delusions on the part of Assyriologists. He attempted to show, also, the so-called bilingual texts and the Syllabories, instead of exhibiting two different languages, were entirely Semitic in their origin and character. These papers called out at the time replies from Dr. Oppert and Mr. Lenormant, of France, and being subsequently published in separate form, Dr. Schrader devotes to them a brief criticism, in the pamphlet before us. In point of fact M. Halevy had but a slight acquaintance with cuneiform studies and, like too many others before him, had ventured upon ground with which he was not familiar. The existence of a Turanian population and language in ancient Babylon is so apparent from the cuneiform inscriptions, that no Assyriologist has entertained a doubt respecting it for many years past. Dr. Schrader limits himself to the correction of some of the chief errors into which M. Halevy had fallen, since his mistakes had been already sufficiently exposed by MM. Lenormant and Oppert.

2d. (a) *Upon the Date of a Babylonian Clay Tablet in the Eleventh Year of Cambyases.* (b) *The Eleventh Year of Cambyases.*<sup>2</sup>

In the *London Academy* for May 19, 1877, Mr. W. St. C. Boscawen had shown the exact agreement of the dated contract tablets, appertaining to the Egibi Banking House, which flourished in Babylon during the reigns of several kings, with the Canon of Ptolemy and the chronology of Herodotus, covering the same period, from 604 to 521, B. C. As is well known, the Canon of Htolemy and the chronology of Herodotus limit the reign of Cambyases to eight years; or, more exactly, to seven years and five months. Lometime after Mr. Boscawen's researches, Mr. Theo. Pinches, connected with the British Museum, discovered another Egibi tablet, dated in the *eleventh year* of the reign of Cambyases. Apparently at first the result of this discovery was to discredit entirely the canon of Ptolemy and the chronology of Herodotus, and Mr. Pinches communicated these facts to the Society of Biblical Archaeology of London. Subsequently, copies of three Egibi contract tablets, dated respectively in the first, seventh and eleventh year of Cambyases' reign, were sent to Dr. Schrader for examination and study. The two papers, whose titles are given above, embody the result of his investigations of these tablets. From the tablet dated in the first year of Cambyases, it appears that he was only a subordinate ruler, conjointly with his father, Cyrus, who was the chief ruler. Cambyases is styled King of Babylon simply, while his father is styled King of Countries, ruling at the same time. But from the tablet dated in the seventh year of Cambyases, it appears that Cyrus had died in the meantime, and Cambyases, ruling alone, is himself styled King of Countries instead of King of Babylon, as in the other tablet. Finally, on the tablet dated the eleventh year of Cambyases, he is again styled King of Babylon. Considering all the facts, it would seem most reasonable, as Dr. Schrader holds, that the canon of Ptolemy and chronology of Herodotus limit intentionally the reign of Cambyases to the period during which he ruled alone, after the death of his father, Cyrus. Thus, that which at first seemed to present a serious difficulty, admits now of a very rational explanation.

3d. *The Names of the Seas in the Assyrian Inscriptions.*<sup>3</sup>

The modes by which, in the inscriptions, the various seas are designated, which were known to the Assyrians, present many variations; and it is sometimes difficult to determine the particular sea to which reference is

1. G. Halevy. *Recherches Critiques sur l'Origine de la Civilization Babylonienne*. Reviewed by Dr. Schrader, in the *Genü Literaturzeitung*, 1879, Ass 272.

2. (a) *Ueber die Datirung eines babylonischen Thontafel aus dem elften Jahr des Cambyases*. Extract from the monthly report of the Imperial Academy of Sciences, in Berlin, Feb. 1879. (b) *Das Elfte Jahr des Cambyases*. Extract from the *Journal of Egyptian Language and Antiquity*.

3. *Die Namen des Meere in den Assyrischen Inschriften*. Extract from the *Journal of the Imperial Academy of Sciences*, in Berlin, 1878.

made. The paper, therefore, which Dr. Schrader has published on this subject, being in every respect reliable, is of much value to Assyriologists as well as to science. It is exhaustive and critical, and is thus everything that could be desired.

4th. *The Cuneiform Inscriptions and Historical Researches*. A Treatise upon the Monumental Geography, History and Chronology of the Assyrians.<sup>4</sup>

This book demands a far more extended notice than any of those to which attention has been directed. It is the latest product, on the part of Assyriology, of the Gutschmid-Schrader controversy in Germany, an entirely prejudiced and one-sided representation of which, from the pen of Prof. Theod. Nöldeke, appeared a year or two since in one of our leading theological journals. As nearly as we are able to judge, Assyriology and Assyriologists, in Germany, had been received in high official quarters with considerable favor and patronage. This fact, as it would seem, had awakened some feeling upon the part of the disciples of "the old learning." The signal for attack was the issue of a new edition of Prof. Dunker's History of Antiquity, which was criticized by Assyriologists themselves on account of his careless appropriations from irresponsible versions of Assyrian texts, and especially his adoption of Prof. Mordtmann's interpretations of the inscriptions of Van.<sup>5</sup> Any Assyriologist could but see that his use of the materials was without proper care and selection. But it afforded the pretext, and Prof. Gutschmid was not slow to improve it, Dr. Schrader being the one to receive his more especial attention. No one has ever attempted to justify the very objectionable spirit and style of his criticisms. The work before us, then, is an elaborate defense of Assyriology and Assyriologists, exhibiting the utility and importance of the study of the cuneiform inscriptions. We offer here a few extracts illustrating the estimation in which Dr. Schrader's reply is held by European critics. Rev. Prof. Sayce, of Oxford, in the London *Academy* of Dec. 21, 1878, has the following:

"Gutschmid's attack on the results of Assyrian decipherment, and more especially on Prof. Schrader, the *coryphæus* of Assyrian decipherment in Germany, has called forth an elaborate and exhaustive reply from the latter. Unlike most controversial books, however, it is a good deal more than a mere reply. It is an important contribution to the ancient history and geography of the East, which presents the results of Assyrian research in a clear and convincing form to the general reader, and offers much that is new to the special student. After reading Prof. Schrader's chapters on the Assyrian canon and its relation to the chronology of the Old Testament on one hand, and the statements of classical writers on the other, it will be difficult for even the most determined advocate of 'the old learning' to refuse any longer to admit the completeness and exactitude of the Assyrian chronology. It may be hoped that after this volume we shall hear no more of those attacks on the results of Assyrian decipherment which still occasionally make their appearance and are the fruit of either ignorance or misconception. Assyrian scholars have, no doubt, much to answer for. Some of them have been too ready to build theories on defective evidence, while others have rushed into print before they had passed through the long training and drudgery needful for interpreting the inscriptions. But the way to correct these errors is not by confounding together the certain and uncertain, or by assuming that one who is entirely ignorant of the subject is better able to judge of it than those who have made it their special study."

Upon some questions it is probable that Assyriologists themselves might hesitate to adopt Dr. Schrader's views; but so far as concerns the vindication of Assyriology, the reliability and importance of its results, every cuneiform scholar will be free to acknowledge his great indebtedness to the author of the work before us.

There are various other works of recent date by other writers which we hope to be able to notice at another time. Dr. Delitzsch, of Germany, has published some excellent and critical treatises relating to Assyrian studies.

4. *Keilinschriften und Geschichtsforschung*. Ein Beitrag zur Monumentalen Geographie, Geschichte und Chronologie der Assyrier. Giessen, pp. vii, 555.

5. See especially Rev. Sayce. *The Academy*, March 2, 1878, p. 184.

MM. Lenormandt, Oppert and Meriant, also, of France, have made some most valuable contributions to cuneiform science, and the English Assyriologists, as usual, are doing much for this department of Orientalism. The Society of Biblical Archaeology of London especially, through its published "Transactions" and other channels, is doing a most excellent work in the advancement of Assyrian studies. It is greatly to be regretted, and is, in fact, almost a reproach to American scholarship, that so little interest is taken, and that by so limited a number, in those researches that promise so much of value to the Biblical critic and the friends of revealed religion. If Germany, England, France, has each its school of Assyriology, it is to be hoped that America also will have in the near future its school, and that we shall not be forever content to accept our knowledge in these matters at second hand from foreign sources.

O. D. MILLER.

THE RELIGION OF ABRAHAM.\* By Rev. L. S. Heberd.

The religion of mankind at the dawn of history was essentially monotheistic. The worship of natural forces of the sun and stars, and of beasts and fetiches, appears very early, but the monotheistic conviction grows more intense the further we go back in the records of thought.

The earliest of the Vedic hymns, the religion of Zoroaster and that of Egypt, show traces of this monotheistic faith. If the Homeric religion does not, we must ascribe it to the fact that Greek life belongs to a later Payan civilization. The patriarchs, the prophets and poets of India were all monotheistic. They were so not merely because they received revelations from God, nor because they borrowed the wisdom of Chaldea, of Egypt and Persia, but because theirs was the primitive religion.

The development of Judaism was but the development of this primitive faith, which by divine process was preserved in its purity and simplicity. While the Babylonian stories are overlaid with Polytheistic superstitions, with impossible cosmogories and with puerilities, the Abrahamic faith was and still is a most reasonable conviction.

In Chanaan the Patriarchal faith presents a perpetual miracle of a rude people preserving the very highest forms of human thought amid the corrupting influences of a higher civilization. The Phœnician nations were more advanced in material development. They were the parents of letters, commerce and civilization, but Abraham did not go to them for his religion. He, the rescuer of the primitive faith from the idolatries of Assyria, betakes himself to a wandering life in the desert, but amid all his changes he preserved that faith intact. Renan says that the desert is monotheistic. The tropical luxuriance of India bred a polytheistic nature worship, but the sea of sand engendered an inevitable monotheism. The desert never changes. There is an intense conservatism in it. Under its unclouded sky and in its pure air nothing decays. Languages, institutions, manners, and even religion, are preserved there.

The primitive monotheistic faith did not originate there, but it was preserved even as the manners of the Bedouin have since been preserved.

This monotheism may have been, indeed was, narrow, intolerant, exclusive.

Polytheism developed art and architecture. The science of astronomy began with polytheistic conceptions of the universe. The Romans rose to their world-wide dominion and their climax of civilization by a polytheistic liberality of spirit. But the moral element was always connected with monotheism. God was a God of the covenant. Nature worship had no morality and no personality. It was the personification of brute forces. Personal purity belonged alone to the monotheistic faith.

The rite of circumcision was a significant feature in the Abrahamic religion. Every form of heathen worship lent encouragement to the vilest unchastity. The defilement of the sexual passion was common. Prostitution was often connected with heathen temple worship. The Abrahamic religion preserved primitive personal purity from the deteriorating effects of heathen worship.

The sacrificial element was also another part of the primitive universal religion which the Abrahamic faith preserved. Human sacrifices among the

\* Universalist Quarterly for Oct. 1879.

heathen was another perversion of this primitive sacrificial faith. These same elements of sacrifice found their embodiment afterward in Christ, who was the true interpreter of the divinely preserved religion for all mankind; but it is evident that it did not originate with Christ, but was in the very nature of that worship which is yet destined to be universal.

NOTE.—It would seem that we have an important confirmation of the Turanian character of the Akkadi, in the inscription of *Agu-kak-rimi*, additional fragments of which were discovered by Mr. Smith, and which was an Assyrian copy of a Turanian original, dating from a period, according to Mr. Smith, anterior to 2,000 B. C. (*Assyrian Discoveries*, p. 225). Everything indicates that this King, and his ancestors, whom he names, appertained to a Kasite dynasty more ancient than any other, of which the inscriptions afford us distinct notices. This monarch proclaims himself King of the Kassi, the Akkadi of Babylonia, the colonizer of the land of Asneen-nak; also King of Padan Alman, of Geetimm (or the Goïm), and of the four regions; but no mention is made of Sumls, nor of Klengi (see *Ibid.* p. 227; Cf. *Trs. So. Bib. Arch.* 4, p. 142). From the data here afforded, it seems necessary to admit: 1st. The original inscription was written in the Turanian language, and at a period anterior to the rise of the Assyrian, or any other Semitic power; yet the Akkadi are named next after the Kassi, the dynasty itself being Kasite. 2d. It was only subsequently that the Gem-itic, especially the Semitic Assyrian power rose into prominence, the name Samir being employed to designate this element of population.

THE PATRIARCHAL DYNASTIES; FROM ADAM TO ABRAHAM, SHOWN TO COVER 10,500 YEAR-, AND THE HIGHEST HUMAN LIFE ONLY 187. By T. P. Crawford, of Tung Chow, China. Josiah Ryland & Co., Richmond, Virginia. 1876. pp. 165.

The author proposes a readjustment of Biblical chronology. He says: "The term of man's existence on the earth is the great question of the age. . . . Ethnology, philology and other kindred studies have in like manner so extended the bounds of human history as to overthrow all our systems of chronology." He thinks the difficulty apparant rather than real, having grown out of a general misunderstanding of the tabulated names and dates recorded in the fifth and eleventh chapters of Genesis.

He lays down and seeks to establish these two propositions:

"I. That the antediluvians did not live, as individual men, to the marvellous length of over eight and nine hundred years, but on an average only 120, and the postdiluvians 128.

"II. That the two tables of Genesis present, in regular succession, nineteen patriarchal houses, or dynasties, or governments, covering a term of, at least, 10,500 years duration.

"Or, from Adam to the Flood, 7,737 years; from the Flood to the birth of Abraham, 2,763 years; from the birth of Abraham to Christ, 2,000 years; from Christ to the present time, 1876 years; making a total of 14,376."

The author quotes the antediluvian table of Gen. V, and says upon it:

"I would call attention to the fact that the several sentences composing each of the paragraphs above quoted are, in the original text, all of the same kind, all equally complete and independent, all beginning with the conjunction 'and,' all wanting the nominative pronoun 'he,' and all but the last requiring the same pause and the same punctuation mark—in English the colon or semi-colon. As the English language requires the nominative to be expressed before the leading verb in every such independent sentence, its omission here, in any case, will produce confusion as to the time and connection of events recorded. Unfortunately, the translators of the bible have, apparently without reason or discrimination, inserted the 'he' in some places and left it out in others."

He claims that the whole question hinges on the interpretation of the sentences of these tables of Genesis V. He says when it reads, "Adam lived 130 years," "Seth lived 105 years," etc., the figures refer to the length of human life, and not to the time when their sons were born to them. He claims that, "The Hebrew Scriptures never employ this kind of phraseology, or the verb 'lived' with definite numbers, to indicate the age of a man at the birth of a son; but they invariably say, such an one *was a son of* — years, when his son was born unto him, or some other event took place."

He says the Hebrew has set forms of language to express each of such ideas. The expression is always something like this: Genesis XXI, 5 (rendered literally). "Abraham was a son of an hundred years when his son Isaac was born unto him." He quotes seventeen such instances in the records between Abraham's and Jehosaphat's time, and declares there is not an exception to this rule in the Hebrew Scriptures. He furthermore declares that the verb *liveth* is not used to mark a certain period midway in one's life in any language with which he is acquainted; and he reads seven, ancient and modern. And on the other hand he says *liveth* or *lived* is the verb universally employed in the bible to indicate the termination of men's lives; and quotes Gen. xxv:7; xlvii:28; 1:22; II Kings xiv:17; Job xlii:16; etc.

Taking the ages to which the English version says the antediluvians lived and then begat a son, the author finds an average of 120 years; and this he believes to have been the average length of their natural lives. In confirmation of this view he quotes Gen. vi:3: "Yet his days shall be 120 years," which was evidently written at the close of the antediluvian period; and Mr. Crawford calls attention to the fact that the verb which in English is rendered "shall be," is in the Hebrew in the *past tense*, and so would read in English, "Yet his days *have been* 120 years." He claims that a fair interpretation makes this to mean, that up to that time the average age of men had been 120 years.

But Mr. Crawford should remember that much stress cannot be laid on the fact which he cites; for Conant's Gesenius' Hebrew Grammar, Ed. 1864, pp. 223-4, says, "The form of the perfect stands:

"1. In itself and properly, for *absolutely* and *fully* past time.

"4. The perfect refers even to future time."

No important argument could be built on a verb whose tense may be past or future as the connection decides; because one may think the connection demands this and another that the other is required. Yet we must acknowledge with Mr. Crawford that the writer of Gen. vi:3, had just been narrating *past* events, which goes to support his theory.

The author lays great stress on the fact that no where else in the Scriptures, nor in any records in the world, outside of the tables of the fifth and eleventh chapters of Genesis, as commonly understood, have we any hint of such long lives—of lives exceeding 200 years. He refers to Abraham, the immediate successor of these long lived patriarchs, of whom it is said: "Thou shalt go to thy fathers in peace; thou shalt be buried in a good old age;" and he marks the fact that the "good old age" of the honored servant, who immediately succeeded those who are commonly supposed to have lived from five to nine hundred years, *was 175 years!*

He quotes from the records of the Egyptian priest Manetho and shows that he gives the average lives of the kings of the first five dynasties of Egypt as 95 years. Mr. Crawford shows that all the best Egyptologists carry the time of those dynasties back to a date before the Flood according to Cosher's chronology, and certainly contemporary with the postdiluvians of Gen. xi, when we adopt a modification of the common reckoning.

From Berosus he shows the average length of the lives of the kings of the second Chaldean dynasty, which is generally believed to cover the period between Salah and Teeah, to have been only 88 years; while from Chinese history the contemporary dynasty of that country is shown to have had kings whose average age was only 77 years. In view of these facts he says: "The most ancient and reliable histories know nothing of human life reaching 200 years." We must concede these to be important facts to be considered when weighing his theory, so calculated to revolutionize our ideas of biblical chronology.

The author next proceeds to give his explanation of the term "begot a son in his own likeness," and notes the fact that the words "a son" and "own" are not in the Hebrew and are supplied in the translation. He claims that a fair construction would admit of supplying the word *heir* or *successor* as well as "a son." He thinks the term "own likeness, after his image," are used in Gen. v:3 in the sense of exaltation, as when first met with in Gen. i:26: "And God said, Let us make man in our *image after our own likeness*, and let them have *dominion*," etc. And it is his theory that these words indicate that some one was made the heir of Adam's covenant blessing. He says: "In this sort of sense I conceive Seth was said to be Adam's likeness and image, or successor and representative." W. S. H.

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## TABLE OF CONTENTS. No. 1.

Palestine Explorations.	Museums.
The Silent Races.	Ayenar.
Ancient Lake Dwellers.	Fountain of Youth.
Aztec Signs for Speech.	Mandarin Language.
The Test of Linguistic Affinity.	Asiatic Origin of the Brazilians.
The Elephantine Cave.	Copper Age in Mexico.
Population of Jerusalem.	Our Contributors.
A Monument of Cyrus the Great.	Scope of Our Journal.
Destruction of Ancient Monuments.	Neolithic Implements.
Ancient Settlements of the Phenicians.	Selections from Magazines.—Book Reviews.
Sources of Information as to the Prehistoric Condition of America.	

## TABLE OF CONTENTS. No. 2.

Influence of the Aboriginal Tribes upon the Aryan Speech of India. By Prof. John Avery.  
The Latest Cuneiform Discovery. By Prof. A. H. Sayce, D. D., F. R. S.  
The Assyro-Babylonian Doctrine of Immortality. By Rev. O. D. Miller.  
Osirids of Ancient Egypt. By Prof. T. O. L'aine.  
Human Sacrifices in Ancient Times. By Senor Orosco y Berra.  
Teutonic Mythology. By Prof. R. B. Anderson.  
The Antiquity of Sacred Writings in the Valley of the Euphrates. By Rev. O. D. Miller.  
A Cinerary Urn. By Rev. Selah Merrill, D. D.  
Mount Tabor. By Rev. S. D. Phelps, D. D.  
Editorial Notes.  
Miscellaneous.—The Transfiguration. The Beauty of the Dead Sea. The Holy Land.  
Recent Explorations in Greece. Cleopatra's Needles. A Buried Temple and Palace.  
Synopsis of Articles in Magazines.  
Archæology and Ethnology.—How the Pyramids Were Built. Discoveries at Olympia.  
The Venus of Vienne. The Relics at Præneste. The History of Money. Collections  
of Coins in this Country. Folk-Lore. Mythology.  
Art and Architecture. Geographical Explorations. Proceedings of Societies.  
Index of Articles on Archæology, Anthropology and Ethnology.

## TABLE OF CONTENTS. No. 3.

ACCADIAN OR SUMERIAN? By Rev. O. D. Miller.  
NOTES ON THE CONFUSION OF TONGUES IN THE LIGHT OF MODERN LEARNING. By Rev.  
W. S. Hawks.  
INFLUENCE OF THE ABORIGINAL TRIBES UPON THE ARYAN SPEECH OF INDIA. By Prof.  
John Avery.  
GENESIS AND ABIOTENESIS. By M. C. Read.  
THE DISCOVERIES AT NINEVEH. By W. W. Taylor.  
THE GAN-EDEN OF GENESIS. By Rev. O. D. Miller.  
BUDDHA'S FIRST SERMON.  
EDITORIAL NOTES.—Buddhism and Christianity.—Grimm's Law.—Ancient Armor.  
ARCHÆOLOGY AND ETHNOLOGY.—Museums. A Beautiful Epigram of the Emperor Augustus.  
The Northmen and the Early Condition of Society in Europe. The  
Eddas.  
OUR EXCHANGES. BOOK REVIEWS.

## TABLE OF CONTENTS. No. 4.

THE PYRAMIDAL TEMPLE. By Rev. O. D. Miller.  
ST. PAUL AT PUTEOLI. By Rev. Elias Nason.  
THE SITE OF CAPERNAUM. By Rev. Dr. S. Graves.  
DOES THE BIBLE TEACH THAT ADAM WAS THE FIRST MAN? By Prof. S. H. Trowbridge.  
INFLUENCE OF THE ARYANS UPON THE ABORIGINAL SPEECH OF INDIA. By Prof. John Avery.  
THE NAME JEROVAH. By Charles Elliott, D. D.  
NOTE ON A VENSE IN THE FIRST BOOK OF THE MACCABEES. By Howard Crosby, D. D.  
HORTICULTURE IN THE TIME OF MERODACH-BALADAN. By Rev. A. H. Sayce.  
EDITORIAL.—The Decline of Faith, Past and Present. The Journey of Jacob.  
ARCHÆOLOGICAL NOTES.—Mykenæ. Hitites. Color among the Greeks. Excavations,  
&c., &c.  
LINGUISTIC NOTES.  
GENERAL REVIEW.—Excavations at Olympia. Early History of Arizona. The Explo-  
rations in Mexico. The Growth of Sculpture.  
BOOK REVIEWS. BOOKS RECEIVED.

# THE ORIENTAL JOURNAL.

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No. 4.

## THE PYRAMIDAL TEMPLE.

BY REV. O. D. MILLER.

A critical treatment of the subject, which regards the *origin of the Temple*, would require the space of a series of articles; but it will be an important contribution to this subject if we trace the *origin of the Pyramidal Temple*, which we shall attempt to do in the present article. M. Fr. Lenormant's ability to seize upon and to state a great truth, oftentimes, where only those the most familiar with the subject would be able to appreciate it, was never better illustrated than in the subjoined statement:

"The Pyramidal Temple of the Chaldæans was as an imitation, an artificial reproduction of the mythical 'Mountain of the Assembly of the Stars,' the *Har-Moed* of Isaiah (xiv:13, 14), which sacred tradition placed in the north, and of which there is yet question in the sacred books of the Sabæans, or Mendæans."<sup>1</sup>

To the foregoing, by way of further explanation, should be attached the following, also, by the same author:

"The conception of the holy and paradisiacal mountain, situated in the north, the column of the world, around which turned the seven stars of the Great Bear, assimilated to the seven planetary bodies; this conception, which is that of *Meru* (of the Hindus), of the *Hara-Berezaiti* (or Albordj, of the Persians,) and of the primitive *Aryâratha* ('chariot of the Aryas,' original Aryan name of Meru, or Albordj), has certainly been known and admitted by the Chaldæans. This is superabundantly proved by the admirable and poetic allusion of Isaiah (xiv:12-15) upon the fall of the ungodly king of Babylon," etc.<sup>2</sup>

As will be seen, the two extracts above refer to the same sacred locality, the *Har-Moed* of Isaiah, identified with the Meru or Albordj of Aryan tradition and with the Gan-Eden of

1. *Fragments Cosmogoniques de Berosé*, p. 358.

2. *Ibid.*, pp. 317, 318.

Genesis.<sup>3</sup> In effect, then, M. Lenormant holds that the Pyramidal Temple of the Chaldæans was an "imitation, an artificial reproduction" of the traditionary Mount of Paradise, identified, as shown in my previous article cited below, with the Diluvian Mountain. If the statement of our French Assyriologue is correct, this shows at once what was the origin of the Pyramidal Temple, and it is a matter of very great importance as well to the Biblical scholar as to Orientalists generally; for the Pyramid in stages was doubtless the most primitive form of the temple throughout all Asia, if not in Europe and Africa. But this statement by M. Lenormant, although we have not seen it called in question, is nevertheless contrary, as is most probable, to the impressions of the majority of cuneiform scholars as well as other critics. It is a point, in fact, which has not been discussed heretofore, so far as we are aware, although it demands the most careful consideration. Our first object, in the present article, will be to make good Prof. Lenormant's position here, relying chiefly for proof upon the cuneiform inscriptions.

As stated by our author, and as admitted by all Assyriologists, the two typical and most ancient structures of the pyramidal class in the valley of the Euphrates and Tigris were those at Babylon and Borsippa. All the other pyramids of the country appertain strictly to historical times, those of the earliest known period being built under the reign of Lik-Bagas or Uruk, the most ancient monarch of Chaldæa, so far as known. All these temples, except the one at Babylon, the other at Borsippa, before mentioned, are attributed to kings whose names and eras are known to the inscriptions. They all appertain, then, to the historical period. Not so with the temples at Babylon and Borsippa. They belong to the pre-historic epoch. They are never attributed to any known monarch. On the contrary, they are attributed indefinitely "to the king very ancient," or "to the most ancient king," such being the ordinary mode of reference to them. The pyramid at Borsippa, in fact, according to the general opinion of Assyriologists, was none other than the original "Tower of Babel." Thus there can be no doubt that these two temple structures were founded by the first civilizers of Babylonia, by the original emigrants who journeyed from the Diluvian Mount in the east to the plains of Shinar, according to the Mosaic history.

Now, in the inscriptions of Nabuchadnezzar, certain noteworthy phrases are applied to these two temples which merit a careful investigation. Referring to the pyramid at Babylon we have the expression: *Bit te (min) an-ki zikurat bab-il-ki,*

3. On the identity of the sacred mount of the Aryans with the *Har-Moed* and the "Gan-Eden of Genesis," see the article with this title in the third number of this journal, by the present writer.

"The Temple of the foundation of *An-ki*, the Tower of Babylon."<sup>4</sup> That applied to the pyramid at Borsippa reads as follows: *Bit urme 7 an-ki zikurat bara-sip-ki*, "The Temple of the Seven Lights of *An-ki*, the Tower of Borsippa."<sup>5</sup> Thus the tower at Babylon is here conceived as the "Foundation of *An-ki*," while that at Borsippa is called the "Seven Lights of *An-ki*." The main point of inquiry, in both phrases, is the exact meaning to be attached to the term *An-ki*, whose true Assyrian reading is a matter of doubt, it being variously read and interpreted by different Assyriologists. Mr. Norris would attach to *An-ki* the sense of "the *astronomical earth*, distinguished from the *geographical earth* (*ki*) by the determinative (*an*)."<sup>6</sup> Others render this term by the Assyrian *samu*, "heaven," which is, perhaps, not wholly incorrect. But Mr. Norris' view appears to me the nearest correct, for literally the two elements *an + ki* are heaven + earth, "the heavenly" or "celestial earth." But the first element, *an*, may be taken here as determinative of divinity; in which case the meaning would be the "goddess Earth," or the "Earth-goddess." However, we incline strongly to the literal sense before given, "the celestial earth," and this especially since we are able to give an account of the expression thus construed. It is, in fact, the exact equivalent of the Sanskrit phrase, *svarga-bumi*, "the celestial earth," which was habitually applied to the sacred mountain, *Meru*, traditional first abode of man.<sup>7</sup> The "celestial earth" is a phrase applied by Dr. Faber, also, following the classic authors, to the "Infernal Eden," or the Paradise transferred to the under world.<sup>8</sup> The term *An-ki*, in the Accadian, whatever may be its true Assyrian reading, occurs very frequently in the texts, of which we shall cite soon several examples. But in order to fix the reference of the Sanskrit phrase to the traditionary Mount of Paradise, we quote here the language of M. Obry, just cited:

"*Meru* and its four supporting mountains elevate themselves in the central continent, or *madhya-dwipa*, very high, to which they give the names of *Svarga-bumi*, 'Celestial Earth' . . . and more generally those of *Na-varcha*, *Na-vrita* . . . section or province of *Na*, daughter and wife of Manu, considered as the mother of the human race."<sup>9</sup>

Thus the "celestial earth," or "province of *Na*," is expressly connected with *Meru*, and *Na* herself is identified with the mother of Eden as wife of Manu, the first man. Now, the summit of *Meru* was thought to penetrate the heaven precisely

4. 1st Rawl. Pl. 51, Col. 1, l. 23.

5. Ibid, l. 27.

6. Assyrian Dictionary, III, p. 939.

7. For the application of *Svarga-bumi* to *Meru*, see Obry, du Berceau de l'Espece Humaine, pp. 22, 174.

8. Origin of Pagan Idolatry, I, pp. 13, 21, etc.

9. Du Berceau, p. 22.

in the region of the Pole-Star, called Su-Meru by the Hindus. These data will help to fix the primary reference of the Accadian *An-ki*, the "astronomical" or "celestial earth," to this traditional Mount of the Northeast.

Prof. Sayce states the fact, quite important for us here, that the Accadian phrase *Ditar-Anki*, "the Judge of *Anki*," which he reads *Dayan Same*, in the Assyrian, is a designation of the Pole-Star.<sup>10</sup> Thus, if *Ditar-Anki* denotes the North Celestial Pole, or Pole-Star, then the term *An-ki* itself must refer to the region centering in the Pole, which region was supposed to be penetrated by the summit of the Paradisiacal Mount. The term *Ditar*, "judge," has no locative sense; it is the word *Anki* here that fixes the locality of the entire phrase *Ditar-Anki*, identifying it with the *Svarga-Bumi*, or "Celestial Earth," of the Hindus.

Closely connected with the phrase just explained is another cuneiform expression: *Es-bar An-ki*, "the Crown of *Anki*."<sup>11</sup> Prof. Sayce interprets it "the Crown of Heaven," giving to *An-ki* the Assyrian reading *Samu*, "heaven." As we now see, however, this is not the heaven in general, but the particular celestial region centering in the Pole-Star and penetrated by the summit of the Paradisiacal Mount. The notion of the "Crown of Heaven," referring to this highest central region of the sky, otherwise denoted by the Assyrian *Qagqadu*, was familiar to the Babylonians. Rev. Wm. Houghton, in a critical paper on the cuneiform names of animals, has the following on the name of the constellation of the Great Bear:

"The Accadian expression means 'bear' + 'royal crownship' + 'making'; if the Assyrian word be read *eru-u*, it may denote 'an eagle.' I believe the scribe's mind is still dwelling on the constellation *Ursa Major* (Great Bear), and that 'the bear making its crownship,' has reference to the revolution of the Great Bear around the Polar Star."<sup>12</sup>

We see from these data that the "Crown of Heaven" in the Babylonian conception was the particular region around the North Celestial Pole, more especially designated by the phrase *Esbar-Anki*, "the Crown of *Anki*," or of "the Celestial Earth."

We must limit ourselves on the point before us to one more proof. We have a cuneiform tablet which opens with the following equations:

"1. *An*=*Il-anu*, 'the god *Anu*.'

"2. *An*=*Il-anatu*, 'the goddess *Anatu*.'

"3. *An-ki*=*Il-anu u Il-anatu*, 'the god *Anu* and the goddess *Anatu*' (the wife of *Anu*)."<sup>13</sup>

10. See Trs. So. Bib. Arch. London, III, p. 206.

11. See Sayce, Op. Cit. Cf. 2 Bawl. 58, l. 18.

12. Trs. So. Bib. Arch. v, p. 334.

13. 3d Bawl. Pl. 69, No. 1, Obsv. l. 1-3.

In connection with the foregoing the subjoined remarks respecting *Anu*, by Mr. Geo. Smith, are quite important to be considered:

"He represents the universe as the upper and lower regions, and when these were divided, the upper region or *heaven* was called *Anu*, while the lower region or *earth* was called *Anatu*, *Anatu* being the female principle or wife of *Anu*. Thus, when *Anu* represented height and heaven, *Anatu* represented depth and earth."<sup>14</sup>

To the foregoing, also, it is necessary to add the following from the same author:

"The heaven or region of the blessed was called *Samu*, and was divided into various sub-regions bearing different names, the *highest* being the 'Heaven of *Anu*,' the supreme celestial god."<sup>15</sup>

The facts prove, then, that *Anu* and his wife *Anatu* represented respectively the heaven and the earth; hence the expression *An-ki*, "heaven" + "earth," is the exact equivalent of the two names *Anu* and *Anatu*, applied to these two personages personifying the heaven and earth. But these are not the heaven and earth in general or in their entire extent. *Anu*, as male, represents the particular highest and central region of the sky, styled especially the "Heaven of *Anu*," as distinguished from the other celestial regions. Now, the highest central region of the sky was that around the Pole-Star, penetrated by the summit of the sacred Mount of Paradise. This was the "Crown of Heaven," the Assyrian *Qaqqadu*, Hebrew *Qadqod*, קדקד

"Crown of the Head:" call to mind here the "Great Bear making its crownship," in revolving around the Pole; also the expression *Esbar-Anki*, "the Crown of Anki." There can be no doubt, then, that the "Heaven of *Anu*," which this god represented, was the particular, limited, celestial region centering in the Pole-Star, and penetrated by the summit of the Paradisiacal Mount. Hence, if *Anu* was put especially for the *celestial* region centering in this mount, then *Anatu*, the wife of *Anu*, put for the earth, represented the particular, limited, *terrestrial* region centering in the same sacred mountain. These personages did not represent the entire heaven and earth, but the traditionary heaven and earth as known to the first men. They represented, in a word, the celestial and terrestrial paradises, supposed to be united by means of the Paradisiacal Mount itself. Since, as already shown, the expression *An-ki* is expressly equated to these two personages, it follows that *An-ki* likewise referred primarily to the same celestial and terrestrial regions as *Anu*

14. Chaldean Genesis, pp. 54, 55.

15. Assyr. Discoveries, p. 221.

and Anatu. It is obvious, from these data, that our interpretation of *An-ki* as "the Celestial Earth" is perfectly correct, and that it was primitively applied to the same sacred locality as the Sanskrit phrase *Svarga-Bumi*, "the Celestial Earth," referring to Meru, the reputed first abode of man.

Having now determined the actual meaning of the term *An-ki*, and proved its primitive application by the Babylonians to the sacred mount of tradition, situated in the far east and north, we return to the phrases applied by Nabuchadnezzar to the two pyramidal temples, the one at Babylon, called the "Foundation of *An-ki*," or of "the celestial earth;" the other at Borsippa, termed the "Seven Lights of *An-ki*," or "the celestial earth." It was shown by Dr. Bahr, long since, in his "Symbolism of the Mosaic Cultus," that nearly all the kingdoms of antiquity were regarded as "astronomical," "heavenly," or "celestial earths;" that is to say, they were terrestrial kingdoms modeled after the order and arrangement of the heavenly kingdom. They were imitations, so far as possible, of the heavens. But we now see that which was unknown to Dr. Bahr, that these "celestial earths" were not, originally, modeled after the entire heavens. They were traditionary inheritances from the primitive "celestial earth," which centered in the Paradisiacal Mount. The kingdom of Nimrod was of this character. The four cities, Babel, Erech, Accad and Calnah, constituting the basis of Nimrod's kingdom (Gen. x: 10), are now known to have formed a kind of mystical tetrarchy, and such was the case with the four cities of Assur (Gen. x: 11, 12). These were "celestial earths" whose fundamental idea was a traditionary one, inherited from the Mount of Paradise, the original "celestial earth."

The full significance of the phrases before cited, applied to the pyramidal temples at Babylon and at Borsippa, will be now understood. The builders of these two primitive pyramids, the most ancient structures of the country, had but recently migrated from the Diluvian Mount in the east, identified uniformly with the Mount of Paradise, to the valley of the Euphrates, to the plains of Shinar. Their first work was to found "a celestial earth," in imitation of the primitive "celestial earth," from which they had just journeyed. The Pyramid at Babylon was the "Foundation of the celestial earth" (or *An-ki*). The tower at Borsippa was "the seven lights of the celestial earth" (or *An-ki*). These seven lights were no other, primitively, than the seven stars of the Great Bear, called the "Great Dipper;" although, as stated by M. Lenormant, these seven stars had been "assimilated to the seven planetary bodies." The tower of Borsippa, as completed by Nabuchadnezzar, after its original design, consisted of seven stages, superimposed upon each other, retreat.

ing in size to the upper stage. These seven stages were colored in a manner to represent the seven planets. Upon the upper stage was the sanctuary, of a cubical form, dedicated to the God *Nabu*, the Babylonian Mercury. All these facts respecting this structure are familiar to Assyriologists. The seven stages, as it appears, represented the ascending series of the seven planetary spheres, like the seven stars of the Great Bear; this series terminating with the sanctuary, or eighth stage, which represented the Polar region, the eighth in relation to the seven stars of the Great Dipper. This was the heaven *par excellence*, identical with the "Heaven of Anu." The tower of Borsippa, as stated by Nebuchadnezzar, was not completed to the top by its original builders; but was left, for some reason, in an unfinished state, the same as the "tower of Babel" in the Mosaic accounts.

We have seen that the Sacred Mount of the north-east was supposed to unite the heaven and earth, like a vast column or pyramid; this mountain rising in immense terraces till its summit reached the heaven. An exact imitation of such a mountain would be a pyramid in stages, on the top of which was the sanctuary, representing the celestial region centering in the pole, and penetrated by the mountain summit. These stages, seven in number, represented, as before remarked, the seven stars of the Great Bear, while the sanctuary, forming the eighth stage, represented the region of the pole-star, the eighth in relation to the other seven stars. Note, here, how exactly these data realize the expressions applied by Moses to the Tower of Babel, 'whose top should reach the heaven,' or, as otherwise properly rendered, 'whose top should represent the heaven;' just as the sanctuary, or eighth stage of the tower at Borsippa was made to represent the heaven centering in the pole. As the Sacred Mount united the heaven and earth, so the top of the Tower of Babel, the earliest attempted imitation of it in the Euphrates valley, was intended to reach the heaven, or to symbolize it.

The facts that have been now presented fully justify the statement, as it seems to me, which was cited from Prof. Lenormant, at the opening of the present article, namely: "The pyramidal temple of the Chaldeans was as an imitation, an artificial reproduction of the mythical 'Mountain of the Assembly of the Stars,' the *Har-Moed* of Isaiah (xiv: 13, 14)," this being identified with the Paradisiacal Mount of the north-east. This statement being proved correct by the facts before us, there remains no doubt as to the origin of the Pyramidal Temple—*It was designed as an artificial reproduction of the traditional Mount of Paradise!*

The really primitive character of the pyramidal temple, in Asia, and in other parts of the world, admits of no question.



The most ancient pyramid in the Nile valley, as now held by Egyptologists, was the great pyramid at *Sakkara*, which was constructed in brick, and in stages, precisely like those of Babylon and Borsippa.<sup>16</sup> This shows that the Hamites of Egypt and the Cushites of Babylon had inherited their primitive notions of the temple from the same original source, namely, as an imitation of the traditional Mount of Paradise. The pre-historical civilizations of Central and South America, also, constructed their temples in the pyramidal form, and in stages. This fact, with others which we have not the space to introduce here, indicates that these peoples had derived their notion of the temple from Asia, and ultimately from the great Asiatic Olympus. Finally, the Pagodas of India, China, and other countries of the far east, as shown by Dr. Bahr, long since, were only a later and modified form of the pyramidal temples. It is obvious, then, to what wide extent the conceptions centering originally in the Paradisiacal Mount, had been carried by the races on dispersing from their common home, and embodied in their sacred structures.

Although of a different form, it can be made quite apparent, I think, that the Hebrew tabernacle and temple were designed to embody the same traditionary ideas as the pyramidal temple of the Babylonians; these ideas, however, in their original integrity, and stripped of their later and idolatrous accretions. But to present this part of the subject adequately, would extend the present article to a much greater length. We can only, in the present connection, submit a few facts tending to the conclusion just stated. The Hebrew name of Divinity, *El*, ~~the~~ the Babylonian *Il* or *Ilu*, was common to nearly all the Semitic races, and thus appertained, as Prof. Max Müller has shown, to the period before the separation of these races. In Isaiah's allusion to the *Har-Moed*, *El*, and the "stars of El," are definitely associated with this mountain, whose identity with Meru, or the traditionary Mount of Paradise, is admitted by many critics, and admits, in fact, of but little doubt.<sup>17</sup> These "stars of El," then, can be no other than the seven stars of the chariot, or of the Great Bear, uniformly associated with Meru or Albordj, and are the same as the "Seven Lights of *An-ki*," of the Borsippa pyramid. The actual connection, therefore, primitively, of *El* and of *Elyon* (Is. xiv: 14), "The Highest," with this Sacred Mount of the North-East, seems to be well established.

But it is probable that even the name *El*, as a title of divinity, took its origin from this Asiatic Olympus. It seems to be

16. On this point see Lenormant's *Fragments de Berosé*, p. 363. Cf. Mariette's *Aperçu de l'Histoire d'Égypte*, Paris Edit., p. 76

17. On this point, besides M. Lenormant, already cited, see Wilford., *Asiat. Researches*, vi, p. 448; viii, p. 359, sq. Gesenius, *Comm. Is.*, ii, p. 316, sq.; and various others.

well understood among Hebrew scholars that the name *El*, meaning the "Strong One," is derived from *Ool*, אָוֹל, related to *Eel*, אֵיל, "to turn, to roll," etc. Hence, the meaning of "Strong One" has proceeded from the notion of "to roll, to turn," since, as Dr. Fürst holds, "*the notion of rolling merges into that of strength.*" But it is impossible that the idea of *rolling*, without the aid of *special circumstances*, should ever suggest that of infinite power, attributed to *El*, as name of the Almighty. If, however, we connect this idea of rolling with the expression of Isaiah, "the stars of *El*," understood of the seven stars of the chariot rolling around the Pole, the double notion of *turning*, *rolling* and of *strength*, *power*, will at once strike the mind. The revolution of the immense mass of the starry heavens upon a single, fixed point in the northern hemisphere, would naturally arrest the attention of the first men, and they would instinctively concentrate around that fixed point the vast assemblage of force sustaining this mass and causing it to revolve. Thus *El* was the "Strong One" who upheld the vast fabric of the heavens, causing them to turn upon their everlasting pivots. The rolling motion of "the stars of *El*" around the Pole had given rise to the notion of Infinite Power, attached to this name of Deity.

All goes to show, then, that this ancient Semitic title of divinity was originally associated with the traditionary Mount of Paradise. This one fact will lend significance to certain phrases of the Hebrew text, connecting the tabernacle and temple with the Sacred Mount of Semitic and Aryan tradition. We have, first, the *Har-Moed*, הַר-מוֹעֵד, or "Mount of the Assembly," to which corresponded, evidently as artificial reproduction, the *Beth-Moed*, בֵּית-מוֹעֵד, or "House of the Assembly," and the *Ohel-Moed*, אֹהֶל-מוֹעֵד, or "Tent of the Assembly," referring to the tabernacle of the congregation. Then there is the *Har-El*, הַר-אֵל, the "Mount of El," of which a miniature imitation was the *Beth-El*, בֵּית-אֵל, the "House of El," applied equally to the sanctuary or to the stone set up by Jacob. Finally, we have the term *Ari-El*, אֲרִי-אֵל, the "Hearth of El," applied to the altar of the temple at Jerusalem, together, in fact, with *Har-El*. The term *Ari-El* shows that *El* was primitively the hearth-divinity of the great Semitic race. All these expressions tend to connect the Hebrew tabernacle and temple, especially through the divine name *El*, with the great Olympus of Asia, identified with the Mount of Paradise, and they tend also to show that Moses had, like the other Semitic races, incorporated these primitive traditionary ideas in the tabernacle, restoring them to their original integrity and purity

The two chief apartments of the tabernacle, as Dr. Bahr long since held, symbolized the heaven and earth. But these were not the heaven and earth in general, as this writer supposed; they were the traditionary heaven and earth associated with the Sacred Mount, the first home of man; they were, in truth, the celestial and terrestrial paradises, united by this mountain. The golden candlestick, with its seven lamps, calls forcibly to mind the "Seven Lights of *Anki*," of the Borsippa Pyramid, referring to the seven stars, which we identify with the "Stars of *El*." Thus, Moses aimed to restore to their primitive integrity the traditionary ideas originally centering in the Paradisiacal Mount.

Of the *two fundamental ideas* involved in the primitive notion of the temple, we have attempted to trace the origin of *one* in the present article. The other had reference to the *hearth* and the *hearth-divinity*. Both, as we have seen, were associated with the ancient Semitic name of Deity, the Hebrew *El*. To treat adequately this second idea would require the space of a separate article. Suffice it, here, that the primitive hearth-divinity of a race become, uniformly, its national divinity when it had attained to a nationality. Thus *Ilu* was the supreme divinity of the Babylonians, and, under the name *El*, was identified with *Yahveh*, or *Jehoveh*, the national divinity of the Hebrews.

As will be seen, there is much in the present article that tends directly to confirm the theory of the previous one on the "Gan-Eden of Genesis," in the third number of this journal.

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## ST. PAUL AT PUTEOLI.

BY THE REV. ELIAS NASON.

PUTEOLI, which now bears the name of Pozzuoli, meaning "wells of water," is situated on a promontory about seven miles southwest of Naples, and is remarkable, not only for the scenic beauty of its environs, but also for its ruins and the associations they awaken. It has now about 10,000 people, most of whom indulge in *dolce far niente*, and some ten or a dozen fishing smacks sleep lazily in the bay. The dwelling houses, built of tufa, three or four stories high and covered with stucco, have a comfortless appearance; the churches, of which the Duomo, once a heathen temple, dedicated to Augustus, and now containing the tomb of the composer Pergolese, is the most conspicuous, make a somewhat better show. From the tower of the Duomo which crowns the summit of the promontory, a most

charming prospect is obtained. Looking easterly, the curving shore of the magnificent Bay of Naples, the vine-clad hills of Pausilipo, the spires of Naples, the summit of Mt. Vesuvius (ever smoking) still beyond, and the sharply outlined island of Capri strike the eye; on the south the bay spreads out into the open sea; on the west the view is enlivened by the fantastic headland of Miseno, and on the north by many classic eminences of Campania. The whole of this region is volcanic. More than twenty extinct craters are pointed out in the vicinity of Pozzuoli, and Solfaterra (sulphur-land), between it and Pausilipo, is still active. Monte Nuovo, which rises some 500 feet from the Bay of Baiae, opposite the northwest section of the town, was thrown up by an eruption Sept. 29, 1538, partially filling up the celebrated lakes Lucrine and Averno; indeed this whole region is rifted, scarred and broken by the action of telluric fires.

It is also thickly strewn with ruins of ancient art. The most remarkable in Pozzuoli are the Duomo which has inscribed on its front: "CALPURNIUS. L. F. TEMPLUM. AUGUSTO. CUM. ORNAMENTIS. D. D.;" a vast amphitheatre which would contain 45,000 people; the Labyrinth of Dædalus; the ancient mole of the port, seventeen pillars of which are still visible; a statue of the Emperor Tiberius in the public square (piazza), and the Temple of Jupiter Serapis, erected in the sixth century of Rome, and which stands near the margin of the port. It was disinterred in 1750, then almost entire, and some of the red marble pillars, curiously incrustated with shells still remain, and thereby showing a change in the water-level of the Mediterranean Sea. Fragments of broken columns, pilasters, cornices, and entablatures frequently meet the eye. On one huge marble block, set into the wall of a granary, I read, "E questa una pietra caduta della gran, terma volgaramente nomata Tempio di Nettuno framutata da i secoli in povero vigneto ma le sue attere muraglie dureranno oltre la vita della giovanne fabbriche a maraviglia de posterì."

The environs of Pozzuoli are celebrated in classic story. Here Virgil laid the scene of the 6th book of his *Æneid*. Here are to be seen the River Acheron, the River Styx, the *mare morto*, the Lake Avernus and the Elysian Fields. Here on the curving shore directly opposite, and in sight of the town, Cicero had his villa and wrote his *Quæstiones Academicæ*; here Caligula built his famous bridge across the Bay, and here the execrable Nero planned the death of his mother, Agrippina.

In the Augustan age, Naples was nothing; Baiae, now in ruins, was the Roman watering place, Puteoli the commercial centre. The Bay of Naples bore the name of Sinus Puteolanus, and Cicero named the city "Little Rome." In it and around it the rich Romans built their villas, baths, theatres, tombs and

temples, and here they spent a part or the whole of the year in "riotous living," in luxury and ease. Here the rich products of the Orient were for the most part landed, and here the troops on their expeditions for the mastership of the world embarked.

At this gay and busy mart St. Paul arrived, a prisoner under Julius, in the corn-ship *Castor and Pollux*, from Alexandria, in the spring of the year of our Lord 61. A south wind brought the vessel rapidly from Rhegium directly into the broad and beautiful Bay of Puteoli; and we can easily imagine what must have been the apostle's feelings as, on coming around Cape Minerva, he beheld the magnificent prospect opening out before him. On his right his eye must have rested on the symmetrical form of Capri, rising as a bastion from the sea, and then run along the rocky headlands of Sorento to the city of Pompeii and to Mt. Vesuvius, then covered with verdure and commanding the whole scene. The bold spurs of the Apennines must have arrested his attention; then as the vessel approached the shore, he must have noticed the charming little island Nisida, where Marcus Brutus laid his famous plot to murder Cæsar; and on the left the large islands of Tschia and Procida, and the picturesque point of Cape Miseno. Still nearing Puteoli, and entering its little harbor, temples, theatres, baths and palaces would meet his eye at every point along the shore, as well as from the vine-clad hills beyond. Baiae, the resort of fashion, and Mount Gaurus (Monte Barbaro) would be prominent in the view, and certainly no lovelier view had ever met his eye. On the arrival of a corn-ship from the East the people of Puteoli [Seneca, Ep. 77] used to crowd upon the wharves to give it welcome; and we may well imagine that when the *Castor and Pollux* cast her anchor near the temple of Serapis, and the weather-beaten prisoner stepped on shore, a throng of idlers gathered around him, eager to see his face and learn his crime. But there were "brethren" in the place. They, doubtless, greeted him most cordially, and they desired him "to tarry with them seven days." [Acts xxviii, 14.] This he did, and then went on by the Appian Way to Rome. How he spent those seven days, or who those "brethren" were, we do not know. There were at this period Jews and Christians living at Rome, and the relations of Puteoli with that city were so intimate that we may well infer that there were "brethren" also in that other city. We know that Pompeii, only about 20 miles distant, had some Christian residents prior to its ruin, A. D. 79; yet in point of size and trade and commerce it was far inferior to Puteoli. As well he might be, the centurion Julius was favorable to Paul, and perhaps permitted him, attended by a guard, to ramble through the city and to visit, if he chose, the market place, the temples and the public baths, constructed on

a scale of great magnificence. An active and observant man, as Paul, can see and accomplish many things in seven days. The apostle might have climbed the hill and surveyed the marble Temple of Augustus, walked along the hundred pillars of the famous Temple of Diana, through the hundred chambers of the Labyrinth, and beneath the porches of the majestic Temple of Serapis, in which the mysteries of the Egyptian priests were practiced, as at Isis in Pompeii. The name and works of Cicero were known to him, and he might, perhaps, have visited his villa on the opposite shore and the Avernian Lake near by. We may imagine this, but it is probable that much more of that precious week was spent in counseling the little band of "brethren" to stand true to Jesus; in recounting to them the perils of his voyage; in preaching to them and others in the market place on the Sabbath, and in forecasting what might be his fate on reaching the Imperial City. Christians in peril in a foreign land find their hearts drawn together closely, as by some celestial influence, and themes for conversation never fail.

To the classical scholar, to the antiquary, to the scientist, and to the lover of scenic beauty, Puteoli offers rare attractions. Virgil has described its curious caverns; Cicero has dwelt upon its pebbly shore; volcanic fires have rent its rocks, and so charming is its scenery that the people say: "A part of paradise has come down to us." But the feet of the great apostle to the Gentiles have pressed for seven days its soil; his lips have drunk its waters; his eyes have seen its monuments; his voice has proclaimed the tidings of salvation in its streets. To the Christian this invests it with profounder interest, and its name, enshrined in sacred writ, becomes immortal.

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## THE SITE OF CAPERNAUM.

BY REV. DR. S. GRAVES.

The desire to fix definitely, if possible, the site of ancient Capernaum, is very natural to Biblical scholars and to all Palestine travelers. We know where our Lord was born, where he spent his youth, where was his place of most delightful entertainment and resort; the places of betrayal and trial; where he was crucified and buried, and the place whence he ascended to heaven. If not these exact localities, we know in general the immediate vicinity where all these great memories cluster.

But *Capernaum*, where our Lord had his *home* during the years of his ministry among men; where most of his mighty

works were done, is yet in dispute. That it was situated on the western shores of the Sea of Galilee, and somewhere toward the northern end, is agreed.

There is now neither town nor hamlet between Tiberias and the mouth of the upper Jordan, a distance of some ten miles, save only the wretched huddle of huts, a dozen or so in number, which bears the name of *Mejdel*, supposed, with reason, I think, to mark the site and in part preserve the name of the ancient *Magdela*, the home of Mary Magdalene. This is on the southern edge of the plain of Genneseret. The cities of Bethsaida, Chorazin and Capernaum lay somewhere in this now desolate region, between Mejdel and the northern end of the sea.

There are two places, and I think but two, which divide between them the claim to be the Capernaum of scripture. The first of these is *Khan Minyeh*, which consists at present of a few uninhabitable ruins, and is situated on the very northern verge of Genneseret, as Mejdel is on the southern. This plain, which is one of the most sheltered and fertile and fairest in all Palestine, extends along the pebbly beach on the Galilee, which is now fringed by a luxuriant growth of oleanders, for the distance of some five or six miles, falling back to the highlands of Naph-tali, and forming the segment of a circle some two miles in its greatest depth—is what was known in the days of our Lord as *The Land of Genneseret*, and whose present solitudes were then swarming with a crowded and busy population, some of whom followed the sea and others the plow. A small stream of clear water, though not very sweet, ripples past the ruins and enters the sea, just below a patch of greensward, whose verdure it seems first to have created and then to keep guard of, and on which we pitched our tents for the night of November 5th, 1872.

This is the spot which many—notably Dr. Edward Robinson, in his admirable *Researches in Palestine*, have fixed upon as the true site of Capernaum, and no spot in all that vicinity could have been more beautiful, with the sea before it, the luxuriant plain at its right, and the majesty of the mountains behind it. The sea shoals finely off here, and our bath, on that sultry evening of our encampment, we shall none of us ever forget.

But after all that is brought forward to identify this as the ancient Capernaum, as weighty as Dr. Robinson's opinion surely is, and as much as I should delight to associate the memories of this spot with the earthly home of our Lord, I am far from being convinced of it.

More recent travelers, and especially Dr. Thomson, the author of *The Land and the Book*, who, after a residence of more than thirty years in Syria, is better fitted to judge than perhaps any other man, and more thorough excavations, notably those of

Lieut. Wilson, of the British Exploration Society, fix upon a locality some two miles north of here, whose present Arabic name is *Tel Hum*, pronounced *Hoom*.

This place is a claimant to the honor of being what yet remains of the Capernaum of the New Testament. Here we find more extensive ruins by far than at Khan Minyeh, covering an area of many acres, though now in a state of utter desolation. A single Arab we found there, who seemed to be lazily caring for a dozen or two of black goats that cropped the dry, coarse grasses and had their fold in the principal ruin of the place—just enough to make desolation doubly desolate.

There is no indentation of the shore here, and there never could have been much of a harbor. The ground rises slightly from the water's edge, and continues nearly level for a quarter of a mile, and then rolls upward into ridges which end in the highlands of Galilee. The city must have extended mostly along the shore.

The reasons to be given for making this the ancient Capernaum, are: 1. The *name* which the place at present bears, *Tel Hum*, though there seems little in this to suggest it. But these Arabic names are mightily tenacious in their root-meanings, under great apparent changes in form: *e. g.*, *Bethel* now bears the name of *Beiten*, which comes by dropping the *h*, and changing the final *l* to its kindred mute *n*. *Shiloh*, Seilun, in much the same way. Now Capernaum, when analyzed, is really *Kefr-na-Hum*. *Kefr* means village or town, and all meaning the village of Nahum. When the village or "city," as it was called, had disappeared and lay in ruin, *Kefr* would come in time to be changed for *Tel*, which means a *mound* or a *ruin*. Hence *Kefr-na-Hum* took the designation of *Tel-na-Hum*, and shortened, *Tel-Hum*.

So Thomson reasons, and this conclusion is supported by local traditions, which he has been at great pains to gather during his long residence and frequent visits to all the most important localities in Palestine.

Again, this site accords best with the notices which we have of Capernaum, especially in Josephus, who speaks particularly of the *Fountain of Capernaum*, as very copious, so that the Land of Genneseret was irrigated by it, which it is altogether improbable could have been done by the little spring at *Khan Minyeh*, known as *Ain e' Tiny*, which at present is far too small and too low-lying for such a purpose.

Now there is a fountain admirably answering to this description of Josephus, a little distance to the south of Tel Hun, which bears the name of *Tabiya*. It must have been, when the city was at its largest, but a short distance outside its limits, so near and



so important to the city as to have borne with propriety the designation given it by the Jewish historian, "The Fountain of Capernaum," and in other respects to answer his description. It is even now very large and abundant in excellent water, and continues so through the dry season. And that this is, moreover, the fountain anciently used to water the land of Genneseret, is evident from the remains of water-courses yet plainly traceable in cuttings through the rocks which separate this fountain from the plain below, the former being, I should judge, from fifteen to twenty feet above the level of the latter.

Again, the *nature* of the ruins here found, point in the same direction. A short time previous to my being there, Lieut. Wilson made some excavations which resulted in bringing to light a very interesting relic, and which will help, I believe, to settle the question now under discussion. The relic was a temple, or some public building of note. It was fresh from its covering when I was there, and I give the entry I made in my journal on the spot:

"Reached Tel Hum at 11 o'clock. Found the interesting ruins which Wilson refers to, and which he has partly uncovered. I examined with what care I could, during the two hours allotted us here, and beneath the scorching sun which was now in its strength, these and other remains. It has the appearance of being a small temple. I found eleven bases of columns *in situ*, and three others which had been displaced. These measured across the top nearly three feet. The columns were two feet four inches in diameter. The architecture which they had supported was three feet in height. The hewn stone slabs which formed the sides were twenty inches in thickness. The building was after the Corinthian order of architecture, and the workmanship very creditable considering the material, which is a coarse limestone of a light grayish color, but not fine enough to be called marble. It belonged, no doubt, to the Roman period. Wilson suggests that this may be the *synagogue* which the pious Roman had built, as recorded Luke vii.: 5: 'For he loved our nation, and hath built us a synagogue.' In the original, '*the synagogue*,' as though in that little city, it was a marked and well-known edifice."

The form and size of the building it would be difficult to fix, but the fragments as they were scattered about, covered, I should think, from a third to half an acre.

Other less conspicuous relics are to be found scattered over the space of half a mile along the sea-shore, and a quarter of a mile back from it.

For these and other reasons which I have not space to mention, it is now generally held that this was the home of our

Lord—"his own city"—during the three and a half years of his ministry among men. To have stood there, to have looked upon the back-lying hills, among which He so often retired to pray; to have looked upon these waters just as they appeared to Him; over which He so often sailed, and upon whose waves He once walked; to have trod this shore, and stepped, perchance, upon the same pebbles that his foot had pressed, is to enjoy a life-long benediction.

GRAND RAPIDS, MICH., August 18, 1880.

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## DOES THE BIBLE TEACH THAT ADAM WAS THE FIRST MAN?

BY PROF. S. H. TROWBRIDGE.

We may, perhaps, best answer this question by seeking light on other questions to which the one before us is very closely related.

1. *In what did Cain's punishment consist?* Two items in God's sentence were "Thou art cursed from the earth;" and, "a fugitive and a vagabond shalt thou be in the earth." Cain replied: "My punishment is greater than I can bear;" and said in interpretation of it, "from thy face shall I be hid, and every one that findeth me shall slay me." Commentators generally agree that he was thus made a perpetual exile, banished from the presence of God and from his family connections where the worship of the true God was maintained. Since the murderer shows no signs of repentance, but merely complains of his punishment, it is presumable that an accusing conscience, or the loss of spiritual benefits, enjoyed by others of his family, would not very seriously affect him as a punishment. If he was exiled from his father's family, and had no human being to associate with, he was, indeed, severely punished; but, if this be so, who was his wife? and whence the inhabitants of the city he built in the land of Nod?

If Cain's wife was a descendent of Adam, she must have been the former's sister or some near relative, and if his fear was from the vengeance of his *own kindred*, as most commentators explain it, he must have been still among them, and it is difficult to see what was that "punishment greater than he could bear," and in what respect he was banished from the presence of the Lord. If she was *not* a descendant of Adam, there must have been other peoples, not of Adam's line, then living. If we suppose Cain had married his sister or niece—as Seth must have done—before God's curse was pronounced upon him, and taken her

*with him* into the land of exile, the difficulty of the question as to who his wife was would seem pretty satisfactorily obviated. But there is no mention of Cain's wife before he dwelt in Nod, and she *is* mentioned soon after it. This is, indeed, in immediate connection with the statement that he left Eden and dwelt in Nod, and we might infer that he took her with him, but we might, with equal reason, infer that he did not. And perhaps with greater reason; for this would greatly lessen the severity of his punishment, and inflict equal severity on an innocent party. Cain's complaint, "every one that findeth me shall slay me," has been used to show that other peoples were then on the earth besides Adam's family. It has been said in reply that the Hebrew word may be translated every *thing* as well as every one, and might equally well refer to wild beasts. But God's reply to Cain, "*Whosoever* slayeth Cain, vengeance shall be taken on him seven-fold," shows that persons are referred to and not beasts. If these persons were Cain's relatives, the question remains, what was his punishment? If they were not, Adam can not be the father of all mankind.

II. *What is the meaning of "God hath made of one blood all nations of men to dwell on all the face of the earth?"*

It is fair to conclude that the Bible is everywhere designed to teach *spiritual* rather than physical truth. This is very clearly shown by Christ himself. He said to the people: "Except ye eat my flesh and drink my blood ye have no life in you." Yet he afterwards told his disciples that there was no benefit whatever to be derived from the flesh, and that his words should be taken with spiritual signification only. "The flesh profiteth nothing, the words I speak . . . are spirit and . . . life. So it is throughout the Bible. Hence, it is far more reasonable to conclude that the oneness referred to by Paul was a spiritual and not a physical unity.

The word (*αἷματός*) blood is omitted in fourteen of the principal MSS. from the fifth to the eighth centuries, including the Vatican and Alexandrian; but found in the same number from the fifth to the eleventh centuries. Many who accept the doctrine of the unity of man in Adam admit that the word for blood is "wanting in the best manuscripts;" that Paul does not conclusively assert that all men have descended from a single pair; but that he refers to the higher unity of mankind as made by God—unity of physical nature so as to be capable of procreative mixture. This view has decided advantage over the common interpretation, because the latter, "admitting oneness of origin and throwing the Adamic creation back myriads of years, requires the violation of the sacred text and destroys the messianic genealogy." Even supposing the word for blood is

not an interpolation, the expression "all nations of men" may have no wider meaning than "every nation under heaven," "every creature which is under heaven," and others, which were limited to people known to the Jews, who were doubtless all of Adam's blood. The statement that Eve was the mother of all living, is probably another case of synecdoche. Again, that expression "one blood" is very similar to Paul's expression "one flesh of men, another flesh of beasts," etc., and this surely does not mean that every variety of beasts, of fishes, and of birds, came from a single pair.

Much has been said about the "precious thought of human brotherhood," and we all deeply deplore anything that will weaken this common bond, which is weak enough already. "Without this idea of blood union," we are told, "it would not survive a generation; the 'rights of man' would disappear like a shadow, and philanthropy become an unmeaning word." If the only link that binds man to man were the physical, these sad results might well be anticipated; and they can be held in abeyance only by the conviction that all men are morally and spiritually united. If the relationship has its nearest and only point of union in Adam's blood through a line of unknown ancestry at least 6,000 years long, how much above a "shadow" would be the brotherhood of man? The fact that all men are created in the image of their maker, with close mental and moral affinities is, doubtless, a much stronger bond of union than mere blood. This fact makes a man merciful and compassionate even to his beast; without it he would not be merciful to his own brother.

It is claimed that "Christ's incarnation and birth of a human mother is a vital fact and most central point of Christianity. Carefully delineated genealogy on both the mother's and legal father's side show the importance of this." Also, "Word became flesh;" "born of a woman;" "born of Virgin Mary;" etc; and that "unless we keep a firm hold upon this idea of unbroken descent . . . there is no telling who is akin to Christ." We may not comprehend, in all its fullness, the exact reason why the Word became flesh. But Christ has clearly shown us whom he counts as his relatives when he says: "He that doeth the will of my Father, the same is my brother, and sister, and mother." His nearest relatives are they that "hear the word of God and do it." "The promise of God to Abraham was not to the seed by birth but the seed by faith. The promise includes the natural seed only as they are the faith-seed, and comprehends all the faith-seed of the earth even though not natural seed." Paul teaches that there is neither Jew nor Greek, bond nor free, but all are "one in Christ." "They which are of faith,

the same are children of Abraham." "And if ye be Christ's, then are ye Abraham's seed and heirs, according to the promise." Notice that the oneness is not in Adam or in Abraham by blood, and not even in Christ by blood, but in Christ by faith; that the blessing of Abraham comes on the Gentiles through faith in Christ; and that all are Abraham's seed and heirs of the promise if they be in Christ by faith, without any regard whatever to blood descent. Does not, therefore, the spiritual signification swallow up the physical, and include all mankind, of whatever race or blood, in the redemption of Christ through faith?

III. *Was the result of Adam's sin and of Christ's atonement universal?*

It is often stated as a strong, if not a crucial argument against plurality of origin, that all and only those who sinned in Adam are redeemed in Christ. This is based on Paul's statement, "as in Adam all die, so in Christ shall all be made alive." The interpretation of this passage by both the advocates of the unity and of the plurality theory is practically and almost literally identical. The one has it, "The consequences of Christ's obedience extended as far as of Adam's disobedience." The other, "The life brought in by Christ is co-extensive with the death brought in by Adam." Now, the usual conclusion is, if there are any on earth not of Adam's line, they are excluded from the salvation purchased by Christ. M'Causland, by emphasizing "as" and "so," implies that if any are not redeemed in Christ they were not lost in Adam. The "all" in the one case is just as far reaching as in the other.

There is no power in the blood, as a physical substance, to corrupt the heart or to give an irresistible tendency to sin; if this were so, corruption and transgression thus constrained would cease to be sin; and God looks upon and judges man as a spiritual rather than as a physical being. Hence, the sin of Adam could just as effectually bring death upon those not of the same blood relationship as if they were his own offspring. Since the second Adam has purchased salvation for all that believe in him without regard to blood descent, we would expect that the first Adam, his prototype, would entail death on all regardless of blood descent. We have already seen from scripture that the promise of redemption by Christ is not to the natural seed alone, but to the faith-seed and all the faith-seed of whatever race they may be. This is further shown from the fact that in the promise to Abraham, "in thee shall all families of the earth be blessed," the original word for families is the same as the word used to designate the kinds or species of animals that went forth from the ark. Prophecy also, abundantly proves the same point. (See Isa. 56: 6-9; 66: 18 and 19; Mal. 1: 11.) And Christ

makes it conclusive when he says: "Go ye into all the world and preach the Gospel to every creature." The Gospel would be far from "good news"—it would be the veriest mockery—to any one who was excluded from its benefits.

Another passage of no little difficulty, bearing on this point, is this: "Nevertheless, death reigned from Adam to Moses, *even those who had not sinned after the similitude of Adam's transgression.*" Who are those who had not sinned "after the similitude of Adam's transgression?" Advocates of plurality say pre-Adamites. Many advocates of unity say infants. But we need not understand either. They may have been those who lived during the patriarchate (Adamites as well as extra-Adamites, or the former exclusively) who had not, like Adam transgressed a revealed law, a positive command threatening death to the disobedient. But, since they had sinned and were subject to death, they must have been under some law. The apostle's argument condensed is this: During the patriarchate there was death, therefore sin, therefore law. An old English writer gives the following solution to this passage: "All evangelical theologians admit that the justifying power of Christ's death so had a retrospective effect that sin was forgiven and man saved before the atoning event. So both the law given to Adam, and his transgression of the law and penal death, had also a retrospective effect. Over pre-Adamite man there had been no law; and whatever wrong-doing man committed had not the character of sin—for sin is not imputed where there is no law—and death had not the character of penalty for sin. But, in and by Adam, law and sin entered into the world, and penal death by sin; and *so death passed upon all men*, Adamite and pre-Adamite alike, for all have not only done wrong, but sinned."

#### IV. *What is the general tenor of Scripture teaching?*

In the Old Testament are seven names, Rephaim, Emim, Nephilim, etc., all of which are rendered "giants," which term may refer to ferocity of character rather than to great stature. We have no history of these giants except their names. The Bible does not tell whether they were, or were not, descendants of Adam. It seems to leave it—as we consequently must—an open question, too unimportant to demand further attention than incidental reference, because foreign to the Bible's purpose. If they are descendants of Adam, the fact that we have no history of them would lead us to infer that there may be others of Adam's line not mentioned at all. And if this be so, we might as reasonably suppose that others, *not* of Adam's line, were in existence, but unmentioned because foreign to the object for which the Bible was given. Many of Adam's line are not mentioned, or not recorded in full. Genesis x. commences: "Now these are

the generations of the sons of Noah," and concludes, "by these were the nations divided after the flood." It is claimed that this chapter "was *certainly* intended to represent the ethnological germs and branches of all the people then supposed to be on the earth." Yet Gen. v. commences: "This is the book of the generations of Adam," and we would suppose with as good reason that this included *all*. But here no mention whatever is made of Cain or his descendants.

It has recently been said: "Scripture, in its *prima facie* aspect, teaches unity." This seems true, doubtless, chiefly because, till comparatively recent time, this has been the only view men have held. So for a long time, the six days of creation were understood to be literal days. If the Bible was first seen now, in the light of modern archæology and ethnology, its *prima facie* aspect might lead to a far different conclusion. By the same author it is claimed that "the assumption is false or unfounded that Cain, Abel, and Seth were the three eldest, and that the 'sons and daughters' (Gen. v. 4) were born after Seth." And, surely, if the sons and daughters mentioned after Seth were really before him, we might suppose with equal reason that Nephilim and other giants, who were already "in the earth in those days," preceded Adam.

The Bible history, after recording the descendants of Noah, "soon leaves the world at large, withdraws itself to the Shemitic branch mainly, then to the Abrahamic division of it, then to one chosen people, with briefest mention now and then of other nations in their necessary historical intercourse with these." The advanced age of the Patriarchs before children were born to them, is accounted for on the supposition that "Moses does not record their first-born sons, but only the succession from Adam through Seth to Abraham." From these instances, and many others that might be noticed, we reasonably infer that it was the purpose of Scripture to give the history of only one race as a *representative*, and of only representative portions of this one. And when we know that many then living have no history in the Bible because their record is not necessary to the accomplishment of the Bible's end, it is as reasonable to suppose that others prior even to Adam were not mentioned, or mentioned only incidentally for a similar reason.

In the first verses of Genesis vi., most commentators regard "sons of God" as referring to the family of Seth, who was professedly religious; and "daughters of men" as descendants of the apostate Cain. If, now, Cain's descendants intermarried with those of righteous Seth, the question returns, In what respect was he hidden from God's face, driven from his family, or severely punished? Others regard the sons of God as young men

of high rank, and the daughters of men as maidens of low birth and humble condition. What, in the first place, should have made such "high rank" and "low birth" if all were members of one family? And, in the second place, even granting these distinctions, how could God, who is no respecter of persons, regard the intermarriage of these as so grave an offense? Again, others hold that the sons of God should be rendered sons of the gods, meaning worshippers of false gods. These are looked upon as a pre-Adamite race. The passage on this supposition would mean: the pre-Adamite worshippers of false gods intermarried with the daughters of Adam. By taking our common translation literally, the most obvious meaning seems to be this: the "man" and "men" mentioned are those whose history the Bible is recording; the sons of God, other parties not previously mentioned as subjects of Bible record. Whether these are pre-Adamites, descendants of Cain, or others in Adam's line, we are not specifically told.

V. *How do the dates of Scripture and of history correspond?*

The discrepancies in the dates are great and apparently irreconcilable on the theory of unity of origin. The time of Adam's creation ranges, according to different authorities, from 5426 B. C., to 3983 B. C. But most commentators agree that Adam's time was a little over 4000 B. C. If this chronology is correct, and Adam was the first man, the dates of every people's history should succeed this date by an amount of time sufficient for the *multiplication* and the *physical changes* of different races, and for their *dispersion* into the various parts of the earth in which their recorded history commences. All these changes are known to require a long period of time, while some are said to be impossible. And since the Bible record informs us that the flood swept from the face of the earth all except Noah and his immediate family, and that the dispersion of the descendants of these occurred about 2230 B. C.; all changes in language, color, features, and distribution must have taken place since this date. According to the most reliable records we have, both the Chinese and the Egyptian nations commenced their history centuries before the dispersion of the sons of Noah, while many agree that their history commenced even before the Bible account of the creation of Adam.

"It must be acknowledged that, with the disagreements between the Hebrew, the Samaritan, and the Septuagint texts, it is impossible to arrive at a certain conclusion as to the exact dates of the creation of man, the deluge, or the call of Abraham." Nor can we with greater certainty fix the exact dates of the organization of the Egyptian and Chinese nations; yet the



dates accepted by all as probable, even the latest of them, run so far back that there seems no doubt of very early origin, and of but comparatively little doubt that their origin extended back the accepted date of Adam's creation. And, as has been suggested, it does less violence to the Scriptures to suppose a multiple origin, and that the Bible is only a history of one race, than to doubt the correctness of the Mosaic chronology. The evolutionist is in no more of a dilemma than those who hold to unity of origin. *He* cannot show the missing links that connect the lowest forms of human life with the highest; neither can *they* show the intermediate steps to mark the retrogression from the Caucasian to the negro, the Mongol, or the Bushman. And the former has this advantage: he is unlimited in time, while the latter must crowd these changes into the brief space of 6,000 years, and that, too, in the face of evidence that no perceptible changes have taken place in the last three or four thousand years.

All the Bible lights on this question, as we now understand them, do not *conclusively prove* the existence of extra-Adamite races. But we submit the question if they do not point towards this conclusion. If we fully accept this, what then? It does not make the truth of God of none effect. We only acknowledge a change of views respecting God's method of working, but *it is God's work still*. If this is the truth, we shall doubtless find it so, in due time, by carefully studying the two revelations to man, each in the light of the other. *Each* has yet to us its numerous difficulties, and there are many points of apparent variance between them. But these manifestly serve a wise purpose in this our state of probation. If there were no difficulties in the problems which the two records present for our solution, we would never *study* them, and hence would know little of them or their Author; and our knowledge of God is the measure of our respect and love for him.

S. H. TROWBRIDGE.

GLASGOW, MO.

## INFLUENCE OF THE ARYANS UPON THE ABORIGINAL SPEECH OF INDIA.

BY PROF. JOHN AVERY.

In a paper published in the second and third numbers of this journal, it was attempted to trace, so far as the facts were accessible, the kind and degree of influence which the aboriginal tribes of India have exerted upon the substance and form of the speech of their Aryan masters or neighbors. At the same time it was stated that the stronger influence had confessedly flowed in the opposite direction, from the cultured Aryans to the savage or imperfectly civilized aborigines.

It is our design, in this paper, to take up this reverse side of the picture and to estimate, as fairly as may be, the share which Aryan civilization has had in shaping and developing the ruder speech of the non-Aryan tribes.

We may lay down as a directing principle in our inquiries the axiomatic truth that, other things being equal, the influence of one race or nation upon the institutions of another will always be in proportion to the duration and degree of local, political, or social intimacy which has existed between them. It thus becomes our first duty to inquire into the geographical distribution of the aboriginal tribes, and to note the varying amount of intercourse which there has been between them and the Aryan immigrants. But we are obliged to confess that a complete answer to these questions involves the solution of some of the most obscure problems of Indian history. The mutations of the population of India extend over such vast periods of time, and are attested by so little of authentic history, that we have to content ourselves with such general facts and probable conjectures as can be derived from incidental notices in literature, from language and physical appearance, and from present ethnic conditions.

1. That northern India was occupied by a dark race on the arrival of the Aryans, is abundantly attested by the frequent allusions to it in the earliest Hindu writings. This race stood its ground for a long time, but was finally driven out, or reduced to servitude, and at length admitted as the fourth and lowest member of the Aryan state. Time and social conditions have now so far effaced race differences that in this part of India we cannot accurately draw the line between the pure Aryan and the non-Aryan population.

2. Passing southward from the alluvial plains of Hindustan, we come to the Vindhya and outlying ranges, which, though rising to no great height, are hardly accessible, by reason of their broken character and the dense vegetation which clothes them to their summits. Here we find a broad belt of aboriginal tribes stretching across the country from the Bay of Bengal to the Indian Ocean and along the western coast range. If we begin at the eastern end of this zone, the principal tribes are the Santhâls, on the eastern declivities of the Vindhya; the Paharias or Mâlers of the Râjmahâl hills; the Orâons of Chûtiâ Nâgpûr; south of these the Lurka-Kols or Ho; on the borders of Orissa, the Khonds and Saura. Tribes bearing the name Kôl are found as far north as the Sone river and as far south as Orissa. The Ceras and Kharvars are other members of this family in the same region. Passing westward we come to the numerous tribes of the Gônds, who occupy an extensive domain

and have given one of the names by which Central India is known. The Kurkhus, who have sometimes been wrongly identified with the Gonds, are settled upon the Sâtpurâ range, between Asirgarh and the Pachmari hills. On either side of the western Vindhya and along the Arâvalî range, are found the Bhills. In the latter range are also found the Mina and Mera, tribes closely resembling the Bhills. The Kolis or Kulis have their home in Guzerat and at the foot of the western Ghauts. The similarity of names suggests a connection between the Kolis and the eastern Kôls, but this has not yet been proved. Among the western Ghauts are found several uncivilized tribes. Of these the Râmusis occupy the mountainous district from Punâ to Kolapur. The Neilgherry hills furnish a home for the Todas, the Kôtas, the Badagas and the Kurumburs. The Vâralis and Kâtodis are two degraded tribes living at the foot of the Ghauts, between Dâmân and Punâ. All of the families or tribes which have been enumerated, with others of less note, stand at about the same level in the scale of humanity, and by reason of the inaccessible character of their country, especially on the eastern side, have had little intercourse with the cultivated peoples of northern or southern India.

3. The most numerous and, from every point of view, most interesting portion of the aboriginal population is the Dravidians, who occupy all the open region south of the Vindhya, with the exception of the Maratha country and Orissa. They also occupy the northern half of Ceylon, from which they have gradually pressed out the Singhalese. Those divisions of the Dravidian people which, according to our plan, concern us here, are: on the extreme south and southeast, the Tamils; north of these, the Telugus; northwest, the Canarese; along the Malabar coast, the Malayâlis; the Tuluvas farther north, and the Coorgs on the western Ghauts, though the latter are on the border line between the civilized and savage tribes. This southern country early attracted Brahmanic colonists, and, so far as history informs us, the two peoples enjoyed constant and peaceful intercourse.

We have now divided the aboriginal population of India into three classes, not according to strict ethnic distinctions, but according to known or presumed exposure to Aryan influence, and, if the proposition with which we started was correct, we shall expect to find the change produced in the primitive speech by the superior people exhibiting a like threefold degree, of which the speech of northern India and of the central and western mountains will represent the two extremes. We now proceed to consider the facts. In the case of the northern aborigines they may be stated very briefly. The influence of

the Sanskrit and the popular dialects springing from it upon their speech was powerfully destructive. Though we may be inclined to underestimate the mental force and culture of the primitive population, yet, at the best, it was far behind the conquering race in civilization. The result was that as fast as the aborigines came into peaceful relations with their conquerors they began to adopt their language.

This occurred first in the provinces earliest Brahmanized, and was longest delayed in Bengal and on the eastern and western coasts of the peninsula, which came latest into the hands of the Aryans, and upon the borders of which the primitive population still hovers. That the Aryans did not succeed in forcing their language upon the aborigines without loss to the purity of their own traditional usage, I showed in my former paper; but their victory was essentially complete, and so entirely did they wipe out the primitive speech that the scanty relics embedded in the Sanskrit and northern vernaculars are hardly enough to enable us to make out its original characteristics.

With the hill tribes, however, the case has been different. Exceedingly jealous of intrusion into their mountain homes, they have either fiercely repelled the Hindu invader, or hidden from his sight in their inaccessible jungles. But the desire to exchange the products of their forests for some of the simple luxuries of civilization has occasionally brought them into contact with the people of the plains. In this way they have caught up some fragments of Aryan speech, with which they have enriched their own scantily furnished dialects, or, in a few favorable situations, have adopted in a corrupt form the language of their civilized neighbors. Of these tribes the Santhâls, living as they do upon the borders of Aryan communities, have been situated favorably to feel their influence, but so far as can be judged from the outline given by Dr. Hunter in his *Annals of Rural Bengal*, the Santhâli grammar is in no way indebted either to the Sanskrit or to the northern vernaculars. Its formations are strictly of the agglutinative order, and exhibit certain other peculiarities, such as the agreement of the verb with both subject and object, which are entirely foreign to the genius of the Indo-European tongues. Its sounds, for which it has no written signs, curiously accord almost perfectly with those of the Sanskrit; but, as I have elsewhere shown, some of these sounds were probably borrowed by the Aryans from the Kôl or Dravidian languages, to which they belong in common. It is in its vocabulary that the Santhâli shows Aryan influence. The lack of words to express abstract ideas, which it shares with all aboriginal tongues, it supplies by borrowing from its richer neighbors. But, if we can believe Dr. Hunter, these

words are drawn, not from the modern Bengali or Hindi, but from some older representative of the same stock. It is even said that a few Prâkrit words are found in Santhâli and *vice versa*. If this be true, it points to an early contact between the two races. The Paharias show foreign influence according to situation. That portion of the people living in the northern and more mountainous district have retained both their primitive customs and their language, while the southern portion, whose land is more open and inviting for agriculture, have adopted the Hindu religion and speak Bengali. The language of the Orâons has borrowed all the numerals above four from the northern vernaculars, and has many Hindi words in its vocabulary, but in structure it is Dravidian, while the greater part of its stock of words is Kolarian. Most of the Kôl tribes have maintained their dialects intact, borrowing a few words from the northern vernaculars. Some in the north, however, have learned to use Aryan dialects. The Kharvars, an allied people, speak a corrupt Hindi about Râmgar, but farther south retain their own language. The same thing is true of the Ceras. The Sauras and Khonds still speak their native language, but the former have borrowed many words from the Oriya, and the latter form their past participles, not by the suffixes *du*, *i* or *si*, which are common to the other members of the group, but by *â*, *sâ* and *jâ*, as do some of the Aryan dialects. The Gônds, who speak a Dravidian language, have borrowed the Hindi relative *do* instead of using the relative participle in its stead, as do the other members of the family. In some other unimportant respects does the structure of the Gôndi resemble the northern idioms, which may as plausibly be explained as independent developments as on the theory of borrowing. An exception is the formation of a passive, which is wanting in the other members of the family, by prefixing the past participle of the active voice to the substantive verb after the manner of some of the Aryan vernaculars. In its vocabulary this language is indebted to the Hindi for a few words of inferior importance. The Kurkus have also many words from the same source which have come in with the adoption of Hindu usages. Of the Bhills, the most isolated tribes seem to retain their own language, while other tribes which have come into closer contact with Mohammedans or Hindus have adopted their customs and a corrupted form of their speech. The Kôlis of Guzerat and the adjoining coast on the south have adopted the language of the Aryans, among whom they live. The Râmusis and Vâralis also speak Marathi. The rude tribes of the Neilgherries speak Dravidian dialects, and, living so far south, do not, so far as I am aware, exhibit the influence of Aryan speech. Some scholars, however,

maintain that in some points they show a striking resemblance to remote members of the Indo-European family.

This survey of the speech of the rude hill tribes, which, in default of particular information, is more general than could be desired, shows clearly enough that in the more rugged, that is in the central and eastern portions of the country, the aboriginal languages have maintained themselves in nearly their ancient integrity, while in the more accessible region, near the western coast, the Aryans have not only made themselves masters of the land, but forced their language upon the earlier inhabitants.

When now we turn to our third division, we traverse a better known field and find a very different state of things. At a remote period, before the beginning of our era at least, Brahmanic missionaries crossed the Vindhya mountains and made their way into the southern peninsula. They were variously received by the tribes settled there. From some they suffered every species of annoyance, even to the loss of life; by others they were treated with the respect which became the sanctity of their lives. They brought with them the culture and learning of the north and communicated it freely to the little group of disciples whom they soon gathered about their forest hermitages. By these, in turn, it was spread abroad over the land until all the tribes of the highland and plains accepted the Brahmanic faith, and with it many northern institutions. We have reason to think that even before the coming of these holy men some of the Dravidian tribes, particularly the Tamils, had risen above the condition of savages and possessed the elements of a primitive civilization. For this reason they welcomed more cordially the further light which was brought by the Brahmans. So far as we are able to discover it was in this peaceful way and not by force of arms that Aryan civilization made its way southward. Since the influence upon these languages was produced by learned men and the spread of Sanskrit literature rather than by an intimate commingling of the two races, we find that the Sanskrit has contributed more than the popular dialects of the north. In sounds the Sanskrit and the Dravidian alphabets coincide in the main, though each originally lacked several sounds possessed by the other. The Sanskrit sounds unknown to the ancient Dravidians—at least so far as the testimony of their written language goes—are the *r* and *l* vowels, the diphthongs *ai* and *au*, the aspirates of each *varga*, the sibilants and *h*. The Sanskrit *r* and *l* vowels suffer change in words introduced into the Tamil, but are pronounced in the other dialects. The diphthong *ai* is changed into *ei* in Tamil, but only in pronouncing Sanskrit words. Quite often

this sound is avoided by the insertion of an euphonic letter between its constituent sounds. Though the aspirant and sibilant letters are foreign to the Dravidian family, they are freely used by most of the languages in the pronunciation of Sanskrit derivatives, and have even secured a lodgement in a few pure Dravidian words. The aspirates, however, are unknown in Tamil, and as a general rule the sibilants also. The *c* of Tamil, when single, is sounded very much like the Sanskrit *s*; when doubled it is sounded as in Sanskrit. The latter is the only sound in Telugu and colloquial Tamil. The *śh* and *s* sounds are not admitted into classical Tamil, but are sometimes heard in the later language in the pronunciation of Sanskrit derivatives. The *h* sound is not known in Tamil or Malayâlam. The same is true of ancient Canarese, but the modern language regularly substitutes it for *p*, and it is also found in Telugu. From these statements it appears that while these Aryan sounds are frequently heard in the Dravidian languages—least of all in the Tamil—they have never been fairly naturalized, and cannot justly be reckoned as constituents of the Dravidian alphabets. The origin of the written signs of these languages is involved in much obscurity. Though their forms have suffered great modification in course of centuries and on account of the material used for writing in southern India, there is considerable evidence that they were borrowed from the Aryans, having been developed from the characters of the Asoka inscriptions. There are at present three Dravidian alphabets: the Tamil, the Telugu-Canarese and the Malayâlam. Besides these there is the Grantha, or character in which Sanskrit is written in the Tamil country. The Telugu and Canarese alphabets agree with the Sanskrit except in possessing separate signs for short and long *e* and *o*, a hard *a* unknown to the Sanskrit and the peculiar vocalic *l* found only in the Vedas and in the northern vernaculars. Old Canarese has also the Dravidian vocalic *r*. The Malayâlam alphabet agrees with the Telugu and modern Canarese, except in having the vocalic *r* and but one sign for the short and long *e* and *o*. The Tamil alphabet differs considerably from the others. It has now, but did not formerly have, two signs for short and long *e* and *o*. It has no distinct signs for the aspirates, the sonants, the sibilants, or *h*.

## THE NAME JEHOVAH.

BY CHARLES ELLIOTT, D. D.

The name Jehovah contains the germ and principle of all theology. The Hebrews called it, by way of emphasis, *Ha Shem*—"The Name;" *Shem Há-Etsem*—"The Very Name;" *Shem Hammeyochad*—"The one, singular, or peculiar name;" and *Shem Hammephorash*—"The Name of Manifestation," as making known the Divine Nature; or, by giving to the verb *pharash* its Aramaic meaning, "The separate, or distinguished name," i. e., the name which is especially sacred. In the Targums, it is called the *Shema Rabba*—"The Great Name;" and among the Cabalists, *Shem Shel arba Othioth*—"The Name of Four Letters," (Greek, *Tetragrammaton*).

So sacred was this name considered among the Jews, that it was pronounced only by the High Priest, once a year, in the service of the Day of Atonement, the people, at the instant, falling prostrate on the ground. After the time of the High Priest, Simeon the Just, it ceased to be spoken. It was heard in the temple, for the last time, from his lips.

## ORIGIN OF THE NAME.

Von Bohlen denies that the name is of Semitic origin, and connects it with the Sanscrit *devas*, *devo*, the Greek *Διος* and Latin *Jovis*, or *Diovis*. He omits, however, to explain how the *d* is retained in the Greek and Latin, while no trace of it appears in the Hebrew. Moreover, the relation between the Semitic and Indo-European languages is not established with sufficient clearness to admit his opinion.

Some have endeavored to trace it to an Egyptian origin, and adduce, in proof, a passage from a treatise on interpretation, writted by one Demetrius, in which it is said, that the Egyptians hymned their gods by means of the seven vowels; and the seven Greek vowels have been arranged in the order *ΙΕΗΟΟΥΑ*, which they affirm, spells Jehovah. But the more probable opinion is, that these vowels represented the seven notes of the scale in music. Another argument for the Egyptian origin of the name Jehovah, is found in the circumstance that Pharoah changed the name of Eliakim to Jehovakim (2 K., xxiii, 34), which the Egyptian king would not have done had he not imposed upon the King of Judah the name of one of his own gods. But this mode of reasoning would prove the word to be of Babylonian origin, inasmuch as the king of Babylon changed the name of Mattaniah to Zedekiah (2 K., xxiv; 17).

It is not worth while to notice the attempts that have been made to trace the name to a Phœnician and Canaanitish origin.



These tribes, speaking a language cognate to the Hebrew, probably derived their knowledge of the name from the Hebrew. The name is doubtless derived from the Hebrew verb *hayah*—"to be."

#### MODE OF REPRESENTING THE NAME.

It has been remarked that the name ceased to be spoken during the high priesthood of Simeon, the Just. The consequence was an utter oblivion of the orthoëpy of the name. Its oral sound and its grammatical vocalization were forgotten. The four consonants remain; but the various ways of vocalizing them greatly modify the signification. The following modes of vocalization have had each its advocates, viz: Ye He Ve H, Ye H Ve H, Ya H Ve H, Ya Ha Va H, Ya Ha Ve H, Ye Ho Va H.

The third person masculine future, or imperfect, as Ewald calls it is *Yihyeh*, or, *Yihveh* (if taken from the form *havah*), "He will be." This form of the verb gives the consonants Y H V H, which represent in Hebrew the sacred name Jehovah. God affirmed of himself (Exod. iii; 14) *Ehyeh*, "I will be." This does not mean, however, that God is only to be hereafter; but it denotes the permanent existence of a Being who now is, and who ever has been. An attempt, perhaps somewhat fanciful, has been made to unite the three elements of the verb *havah*, or *hayah*—the preterite, participle and future—in the name. Thus, *Yehe*, "He will be;" *Haveh*, "He is;" and *Havah*, "He was." This corresponds to the paraphrase for the Divine Being, in Rev. iv; 8:  $\sigma \eta \nu$ ,  $\text{καὶ } \sigma \omega \nu$ ,  $\text{καὶ } \sigma \epsilon \rho \chi \sigma \mu \epsilon \nu \omicron \varsigma$ .

#### MEANING OF THE NAME.

The advocates of the documentary theory of the Pentateuch rest it upon the assumption that the names Elohim and Jehovah are synonymous, and that they can be used indifferently, one for the other. This is a mistake. They differ from one another just as a common differs from a proper noun, as *Θεός* from *Zeus*, as *homo* from *Johannes*, as *man* from *William*. The one expressess the species, the other the individual. This distinction is brought out in the words of Elijah (1 Kings xviii; 21): "If Jehovah be Elohim, follow him; but if Baal (be Elohim) then follow him." In this passage both Jehovah and Baal are used as proper names. Hence, in Hebrew, Jehovah is not found in the construct state, neither does it take the pronominal suffix. The Hebrews never said the "Jehovah of Abraham," nor "my Jehovah."

Another distinction is made by Biblical scholars, which seems to have a scriptural foundation. "The names are related to each other as power and evolution. Elohim is the God of the beginning, Jehovah of the development; Elohim is the creator, Jehovah the mediator. Elohim is the God of the beginning and end, the Creator and Judge; Jehovah is the God of the middle,

of the development which lies between the beginning and the end." Jehovah is the God of the covenant, the God of redemption. This view sheds light on Ex. vi; 2, 3, where God reveals himself as Jehovah in connection with the redemption of Israel. The mere name, consisting of four letters, was certainly known before.

#### NOTE ON A VERSE IN THE FIRST BOOK OF THE MACCABEES.

BY HOWARD CROSBY, D. D.

In the first book of the Maccabees (xii., 37), we read: *καὶ συνήθησαν τοῦ οἰκοδομεῖν τὴν πόλιν, καὶ ἤγγισε τοῦ τείχους τοῦ χειμάρρου τοῦ ἐξ Ἀπηλιώτου, καὶ ἐπεσκεύασαν τὸ καλουμένον Χαφεναθά.* Literally translated, this is "and they were gathered together to build the city, and he approached the wall of the valley, that which is from Apeliotos, and they restored that which is called Chaphenatha." That there is a false reading here is evident. Jonathan is described as strengthening the fortifications of Jerusalem. He is said (ver. 36) to have determined to give an additional height to the walls, and to build a high wall between the citadel (that the Syrian party had hitherto occupied) and the city, so as to cut it off from communication with the city markets. Now the 37th verse seems to show the fulfilment of this design. But the present condition of the text gives nothing explicable. I propose to read *ἤγειρε* for *ἤγγισε* and *Καπηλίκου* for *Ἀπηλιώτου*, putting *τείχους* in the accusative, thus: *καὶ ἤγειρε τὸ τεῖχος τοῦ χειμάρρου τοῦ ἐκ Καπηλίκου*, which, translated, is: "and he erected the wall of the valley which is by the market." This would be the new wall intended to cut off the citadel from the town. It would be erected on the edge of the valley of the market, *i. e.*, the Tyropæon, where, even at the present day, the bazaar is found. This *χειμάρρους* would thus naturally be distinguished from the great *χειμάρρους* of the Kedron (John xiii., 1.) Still again, what is Chaphenatha, which they restored? Is not Chaphenatha the same as Gabbatha of John xix., 13? If we suppose the word Gabbatha to be composed of the two Semitic roots *גבה* and *עתר*, and so to mean "hill of violence," the *n* in Chaphenatha may either represent the Ayin (according to a well-known change), or the final *n* of the second root by metathesis, or the word may be simply like the Hebrew *Gibbethon*, called Gabathon by Eusebius and Gabatha by Josephus, meaning only "a height." The place referred to would then be the spot where afterward the fortress of Antonia was erected, north of the temple, which finally became the citadel, instead of the old Baris, or Acra. It is not strange that the old Hebrew name should cling to a part of Antonia, perhaps to the oldest part of it.

## HORTICULTURE IN THE TIME OF MERODACH-BALADAN.

BY REV. A. H. SAYCE, D. D., F. R. S., QUEEN'S COLLEGE, OXFORD, ENG.

It has long been known that the kings of Assyria and Babylonia did not consider horticulture beneath their notice. An old work on agriculture, written in Accadian times, and therefore before the 17th century B. C., tells the farmer to choose the 30th day of Marchesvan, or October, "for the burning of weeds," and enjoins "the tenant of the farm to carry on his own head two-thirds of the produce and pay it to the owner." Another Accadian work contains some of the short songs with which the ox-drivers beguiled their labours in the field. Here are three of them: (1) "Before the oxen as they march, all in the grain thou layst thee down"; (2) "My knees are marching, my feet are not resting; with no wealth of thine own, grain thou begettest for me"; (3) "A heifer am I; to the cow I am yoked; the plough's handle is strong; lift it up, lift it up!"

The Assyrian king Tiglath-Pileser I. (B. C. 1130), was a patron of arboriculture, and his royal botanical gardens were stocked with the trees of conquered countries, which he endeavored to acclimate in Assyria. "The cedar," he says, "the *liccarin* tree and the *allacan* tree, from the countries which I have conquered, these trees, which none of the kings my fathers before me planted, I took, and in the plantations of my country I planted, and by the name of plantation I called. The plants which did not exist in my country I took. The plantations of Assyria I established."

Many years afterwards the Chaldæan prince Merodach-Baladan, who held possession of Babylon for more than twelve years, and, after making alliance with Hezekiah and other sovereigns in western Asia, attempted to resist both Sargon and his son Sennacherib, displayed a special interest in gardening and horticulture. A small, but well-written and well-preserved tablet has lately reached the British Museum, which gives a list of the gardens and plantations which belonged to him in Babylonia. Sixty-seven of these are described as being plantations as well as gardens; six more were nursery-gardens. The names of the gardens are mostly derived from the districts in which they were situated, or the towns to which they were near; but there were others which had significant names as "the stream of reeds," "the reeds of the waters of the city," or "the little." The colophon of the tablet is as follows: "The seed-gardens of Merodach-Baladan; like the original written and revised (is this) tablet of Merodach-sum-idin, the worshipper of Merodach." The copy, however, must have been made at a considerably later time than

that at which the list was originally drawn up, since in one place no less than six names are imperfect, and the scribe has written against them "recently obliterated." The tablet now in the Museum was probably made in the reign of Nabuchadnezzar, for one of the royal libraries at Babylon, and the fact that a tablet of Merodach-Baladan still survived at that period, proves that the destruction of Babylon by Sennacherib in B. C. 690 was not so complete as the Assyrian king wished to make out. The library, at any rate, appears to have been saved, and with it a record of the great opponent of the Assyrian conqueror.

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## EDITORIAL.

### THE DECLINE OF FAITH, PAST AND PRESENT.

It may be comforting to some in these days of philosophical speculation and skepticism to know that there have been periods before this, in which the same tendencies of thought have appeared. There are three tendencies in this speculation of the present time, namely: Historical, Eclectic, and Agnostic. But in the age which immediately preceded the christian era, the same tendencies appeared. The obscurity of things had brought Socrates to the confession of ignorance, and even before Socrates, Democritus, Anaxagoras, Empedocles, and nearly all the ancients who asserted that nothing could be ascertained or perceived or known. Later also Cicero, while rejecting the divinations of priests and prophets as superstitious errors, yet considered everything, both in physics and psychology, as doubtful. The extreme of Pyrrhonism took hold of many minds at this time. Yet there was, even then, a safety-guard with the best thinkers, so that they were kept from entire despair as to truth. The doctrine of innate ideas was one, which at least brought some minds to a settled point, and thus gave positive convictions.

Cicero was inclined, like Democritus, to give naturalistic explanations of many things, though the doctrine of *atoms* he considered impossible. He says: "You speak of atoms, and spaces between worlds, things which do not exist, and which cannot possibly exist." The soul, he maintained, was superior to matter, and was in a sense divine. He says: "If in any other obscure matter I were able to assert anything positively, then I would swear that the soul, be it air or fire, is divine." By divine, however, he meant not in the pantheistic sense, but simply that it was of the same nature with the gods. He held to a two-fold division of the mind, "one of which partakes of reason, and the other without it"—the seat of the perturbation of

passion. His belief in immortality was also firm and comforting. His words are almost triumphant. Just one year before his death he says: "Oh glorious day when I shall depart to that divine company and assemblage of spirits, and quit this troubled and polluted scene. For I shall go, not only to those great men of whom I have spoken to you, but also to my friend Cato, than whom never was better man born, nor more distinguished for pious affections. \* \* If I am wrong in this, that I believe the souls of men to be immortal, I willingly delude myself; nor do I desire that this mistake, in which I take pleasure, should be wrested from me as long as I live." His convictions of the Divine existence were strong. He says, again: "Who is there, who when he thinks that he is an object of divine care, does not feel an awe of this divine power day and night?" Thus, with the unsettled state of mind in those days of great religious corruption and darkness, there were gleams of hope and faith, which were almost like the dawn of revealed truth, amid the strugglings and anxious state of the natural mind.

Doubtless similar convictions will assert themselves in these days of agnosticism, as the token of a better day, when religious truth shall lay new hold of the convictions of men.

The advent of Christ was at a time when faith was unsettled. The religions of the past were outgrown. Revealed and natural truth had been greatly perverted and darkened, and all philosophy, as well as religion, had lost their power. It is wonderful what a radical change was wrought by the singular birth and the strange life of this man Christ Jesus. When, however, the spirit of truth shall take possession of the present generation, it may be, that a similar change will be brought into our money-loving age, and the very philosophy and power of the present may give way to a higher and better wisdom.

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#### THE JOURNEY OF JACOB.

The International Sunday School Lessons have again brought up the question of the location of Haran.\* The Haran of tradition, that is Charræ of Mesopotamia beyond the Euphrates, is upward of three hundred geographical miles from the central summit of the Gileadite Mountains. It would take not a week but a month to accomplish this journey on foot, considering the difficulties of a route partly across the desert and the additional circumstance pleaded by Jacob as an excuse, that it was the breeding season of the flocks and it would be unsafe to urge them on the road. It would have been a physical impossibility for him to have made the journey in less time. Yet we are

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\*We draw the facts from an article by J. R. Paine, published in the *Independent* a year or two ago.

told that Jacob and his family, including his wife and children, and his numerous flocks, accomplished the journey in ten days. The only way then to reconcile the scriptural account of the journey of Jacob, is to seek for another location of the scriptural Haran. This has been accomplished by certain travelers who find the location.

J. L. Porter, in an account of a visit to a village called *Harrân el-'Awamîd*, or Harran of the Columns, near Damascus, gave rise to the idea that this was possibly the Haran of the scripture. Dr. Beke recognized this and determined on a visit to the spot. Here he found everything to his mind—Rebecca's well; the daughters of the men of the city, with their pitchers, going out for water at the time of evening; flocks and herds; trailing vines bearing on the wine of Helbon, and a distance of seven days from the Mount of Gilead. His conclusion was thus expressed:

"That Harrân is the representative of the place of that name mentioned in the Book of Genesis as the residence of Terah and his descendants, there is now no reasonable ground for questioning.

"The '*Awaj*' is the Pharpa of scripture, the 'river' that was crossed by the patriarch Jacob when he fled from Laban. 'And he rose up, and passed over the river, and set his face toward the Mount Gilead.'

"My wife and I, not having the impediments of the patriarchs or of ordinary native travelers, arrived at the summit of Mount Gilead on the fourth morning after leaving the 'river' at *Kisweh*. And Laban might have performed the journey even more speedily than ourselves, had he not had to start from Haran, whereby the distance he rode was lengthened twenty-six statute miles, if, indeed, he was not at the time even further away to the east than his usual place of residence. For we read that 'he set three days' journey betwixt himself and Jacob,' and, further, that at the time of the latter's evasion Laban was gone to shear his sheep; so that the extra distance, whatever it may have amounted to, had likewise to be traversed after it had been 'told' Laban on the third day that Jacob was fled.

"This Bible incident involves a fact absolutely fatal to the assumption that Padan Aram lay beyond the Euphrates. But if we refer the scriptural Padan Aram, 'Aram of the fields,' to those extensive plains of well-watered and luxuriant pastures, which are now well ascertained to extend for more than three days' journey eastward beyond the *Jebel Hauran*, the distances, and all other circumstances relating to this land, in the course of the patriarchal history will be found to agree perfectly with the supposition. In this sense only can Pethor be alluded to as

‘Pethor of Aram Naharaim,’ not as situated in the part of the land strictly so called, but as included in the range of its dominion.

“At the time when the seventy made their translation of the Bible, the geographical term Mesopotamia had general usage among the Greeks. Then, as the Hebrew expression ‘Aramea of the two rivers’ had a sort of analogy with the Greek word meaning ‘between two rivers,’ they identified the one with the other. But, on looking closer, we easily perceive that this term Mesopotamia does not go back to a period anterior to the conquests of Alexander in Asia.

“At any rate, a collective name for Mesopotamia does not exist in Assyrian inscriptions, nor in the doctrines of the Persian kings. Why should it be otherwise among the Hebrews, who could only have borrowed the name from its ancient possessors?

“Allowing the northern one of the two rivers to be Euphrates, where was the other? At first one naturally thinks of the Orontes, which is the largest river in Syria after the Euphrates; but the Orontes is not mentioned in the Holy Scriptures. It appears, therefore, to be the river of Damascus, styled Abana in the Bible and Chrysorhoes by the classic geographers. This river separates Syria from Palestine, and every traveler going from Northern Syria toward the latter country is obliged to cross the Chrysorhoes. It is, then, altogether probable that the river traversed by Jacob, before reaching Gilead, was the Chrysorhoes.

“The distance which separated the city of Haran from Mount Gilead could be traversed in seven days; but this time is too short for reaching the Euphrates from Mount Gilead, and much more for arriving at Carrhae, a long way beyond.

“Nicolaus of Damascus preserved the tradition that Abraham was a king of that city, and Justin accepted a similar tradition that he was of Damascus origin.

#### ARCHÆOLOGICAL NOTES.

\*MYKENÆ.—The discussion as to the age of the relics found at Mycenæ is still going on among the European savans. Mr. W. J. Stillman writes to the *Nation* from Athens as follows: “The Mycenæ collection is well arranged, and of very great and perplexing interest. I am disposed to side with those who give to it a comparatively modern date, and one utterly inconsistent with the Agamemnonian theory. What is beyond all question, is that there are works of widely different epochs, and amongst the engraved stones are two, nearly three-fourths of an inch in diameter, of lentoid shape, which are most certainly, if there is any certainty attainable in such questions, of workmanship not anterior to the Roman epoch, and distinctly in the manner of cutting, of which we know no example in archaic art known as such. In support of the extreme antiquity of the

We are indebted for many of these quotations to the *American Art Review*.

find, the destructive oxidization of the silver vases is brought forward, but this is more than offset by the fact that the bronze articles are in very good state, and far less corroded than the silver, while fragments of wood and cloth remain. A little sulphur in the soil, or lead in the silver, would, perhaps, account for the condition of the silver ware. Taking, however, the gems as the indications, I should be inclined to dispute an antiquity so great as the period of Alexander the Great.

An unnamed writer in the *Athenæum* of Aug. 21st, in discussing Prof. Stephani's views, comes to a very different conclusion. "M. Stephani," says he, "gives us the option of assigning the graves [if not to the period of the invasion of the Goths and associated tribes, about the year 260 of the Christian era] to the still later incursion of the Goths of Alaric (A. D. 379); but, to deal with the case, which was most favorable to him was not one required to account for the absence of iron from the graves of Heruli, who had matched themselves with Roman legionaries from the west to the east of Europe, and had but lately plundered the armories of Chalcedon, and so many other cities? There is no trace whatever of iron among the multifarious contents of these entombments. . . . And not only is not iron present, but its natural place is taken by bronze. . . . To suppose that the Goths Heruli of the third century fought against Roman levies with the weapons of men of the bronze age, is as reasonable as to assign the weapons of Porus to our opponents at Aliwal and Chillianwallah," Dr. P. W. Forchhammer, some time ago, brought forward still another theory, which he restates in a lately published pamphlet, *Mykenä und der Ursprung der Mykenischen Funde*, Kiel, 1880. According to this theory, the valuable objects of gold, etc., found by Dr. Schliemann, represent the Mykenæan share of the Persian booty made at the battle of Plataiai, which the Mykenæans buried with their dead when the Argives compelled them to evacuate their town in the year 468 B. C.

**HITTITES.**—The subject of Hittite history, and the monuments left by this people, are treated at some length by Mr. W. St. C. Boscawen, in a series of articles begun in the *Athenæum* of Aug. 14th. The Hittite empire is now being restored to its place in the history of western Asia, and the monuments and inscriptions recovered from the site of Carchemish and other cities, show that these rulers of ancient Syria were a city-building and literature-making people, a nation skilled in the arts of war and peace, and not conservative in their knowledge, but transmitting it to others. "The discovery of inscriptions," says Mr. Boscawen, "the records of these Hittite tribes, shows a considerable degree of civilization and independent thought; for the 'vile Khita' had worked out for himself a system of writing which appears to be independent of the systems in vogue either in Egypt or Assyria, and to have developed that writing through more than one stage of simplification, and rendered it suitable to the wants of others. The same with their arts; the monuments which have come down to us, while showing much indebtedness to the schools of Egypt and Assyria, still exhibit certain undoubted local and home-developed features. The discovery of the site of Carchemish, with the arrival of sculptures and inscriptions, the results of the excavations made by the British Museum, has once more revived the interest in the early people inhabiting Syria, which was excited by the discovery of the inscriptions at Hamath. . . . The Hittite empire, like the Assyrian and other empires of the Mesopotamian regions, exhibits in its annals an historico-geographical arrangement; its periods each centre round some city. The earliest, when at war with Egypt during the eighteenth and nineteenth dynasties, is identified with Kadesh [a city, the site of which has not yet been explored, or even definitely fixed upon.] This period extends from about the seventeenth century until the rise of the early Assyrian empire, when we find the era of Carchemish, which is, in its turn, followed by that of Hamath. . . . After the wars with the kings of Egypt, the Hittite empire enjoyed a long period of comparative peace, and profited largely by its treaty relations with Egypt; and it is due to this contact with Egypt that we find Egyptian influences so strong in the works at Carchemish, and, indeed, this influence seems to have made itself felt on the syllabary in use there. The existence of Hittite sculptures bearing on them, also Hittite inscriptions, is of very great importance, as it enables



us to form some idea of the period to which this palæography may be assigned. The work at Jerablus [Carchemish] certainly exhibits the style of a period when the Hittite people were subject to the influences both of Egypt and Assyria, and, with regard to the latter, at a period when Assyrian art was not clear of Babylonian influence.

**COLOR AMONG THE GREEKS.**—One of the most interesting subjects of archæological inquiry is certainly the use which the ancient Greeks made of color. Inheriting as they did, to a certain extent, the knowledge and practice of those noble colorists, the Egyptians, it would be supposed that their eyes were as sensitive to hue as to form, but we have almost nothing to show us how their taste was gratified. The names of their great artists are household words with us, but, except Mr. James Jackson Jarves, we know of no modern connoisseur who has seen an ancient Greek picture, in full color, and the best we can hope to do, seems to be, by cautiously restoring the pigments upon architectural details, to gain an idea of the way in which they worked at more humble decoration.

A firman, giving permission to continue the excavations at Pergamon for one year, is said to have been issued to the Prussian government on July 31st.

A vast number of bronze implements were found, and other remarkable discoveries were made by Prof. Aspelin during the summer of 1880, in his investigation of the ancient barrows of *Lapland*.

Excavations at Delos have just brought to light three marble statues, of which the largest is a *Muse*. The other two are statues of *Venus*. One of these wears the *himation*, which covers the lower part of the body, and places her foot on a tortoise. The other is quite nude, and is on the point of stepping into the sea for a bath, having just thrown off her garment. She closely resembles the *Venus of Praxiteles*. Some days before, a colossal statue of a Roman prætor was found.

A colossal figure generally called *Niobe*, cut in the cliffs of Mt. Sipylus, near *Magnesia*, is supposed to be one of the earliest works of rock-hewn art in Asia Minor. It reminds one of the well-known weeping *Niobe* described by Homer. It is regarded by Prof. Sayce as pre-Hittite.

One of the most remarkable objects of antiquity obtained from Asia since the Assyrian sculptures is the *Hamathite* inscription which has just been placed in the Oriental Gallery of the British Museum. It is composed of dark basalt, about four feet high, and probably formed part of a doorway. On it are five horizontal lines of an unknown character, undoubtedly resembling in some peculiarities the Egyptian, but so distantly connected with this now well-known language that as yet no approach has been made toward its decipherment. The inscription is manifestly *boustrophedon*, and probably reads from top to bottom. The characters are raised by sinking the field of the inscribed lines about three-eighths of an inch. They consist of animals' heads, human hands, feet, birds, a figure resembling an O, trees, crooks, crocodiles, yokes, thrones, or carved chairs, and short lines, or a line between two squares, these latter probably being numbers. From certain groups recurring with variants, there is probably some grammatical system underlying the arrangement of characters, which, nevertheless, partake strongly of the pictorial and ideographic element.

The custodian of the Berlin Agricultural Museum has lately discovered among the carbonized seeds exhumed by Dr. Schliemann, the vetch field-beans and peas, and a peculiar kind of wheat. The wheat is very hard, fine grained, sharp and very flat on the furrowed side, and differs from any wheat hitherto known, and is especially distinct from the thick belled grains of the Egyptian mummies and of the Swiss lake villages. This is the first time that peas have been known to belong to ancient Greeks.

Prof. C. W. Claypole, of Antioch College, Ohio, has been examining the Schliemann collection at South Kensington Museum, and gives it as his opinion that some of the hour-glass shaped pebbles hitherto supposed to be idols, and labelled in the museum as "*Minerva Ornaments*," are nothing more nor less than net sinkers, identical in form and appearance with those found on the shores of our lakes and rivers.

## LINGUISTIC NOTES.

*English Folk-Lore Society.* At one of its last meetings a committee was appointed to consider and report upon the best means of collecting, arranging, proving and comparing the proverbs and proverbial sayings of all countries, ancient and modern.

*The Sunderland Library,* collected by the third Earl of Sunderland during the reigns of Queen Anne and George I, is to be sold in London this fall. This valuable collection of books (and a few prints) consists of some 30,000 volumes, and is celebrated for its magnificent array of first and early editions of the Greek and Latin classics; for its many extremely rare works relating to America; for a series of Spanish and Portuguese chronicles, and other treasures of history.

A dictionary of the *German dialects* spoken in *Switzerland* has been in preparation for the last twenty years, Professor Staub in Zürich, being in charge. The contributions have now all come in, the material is digested and arranged, and the publication in numbers will begin this year. From the short extracts printed a few years ago, we may feel convinced that the linguistic material gathered here is exceedingly voluminous and instructive, and will leave far behind all that has been attempted on this field by the learned Stalder, by Dr. Tobler, and others.

*The Basque language,* which on account of its peculiar and isolated position is more and more attracting the attention of linguists and anthropologists, has found another learned expounder in the "*Comparative Grammar of the Basque Dialects*," by W. J. Van Eys, Paris, Massoneuve, 1879, 535 pages. The first publication of Van Eys on this subject, written in French, like the volume above, dates from 1865.

The vocabulary of the *Nagrandia Language*, Nicaragua, published by Hippolyte de Charencey, in the *Revue de Linguistique*, Vol. XII, No. 3 (July, 1879), from manuscripts left by Abbé Brasseur, is of singular importance for the study of Central American languages. The language is spoken northwest of Lake Managua. Although it does not contain over 250 of the more common terms, it gives us an insight into a stock of languages of which almost nothing is known beyond the fragment of a vocabulary published by E. Squier (Nicaragua, New York, 1852, II, page 320-333), and another series of words contained in Transactions of American Ethnological Society, III, part 2, pages 101, 106, 110, following another mode of transcription than the Bradshaw vocabulary, which is the most complete of all. Syllables and words with few exceptions end in vowels and diphthongs. The vowels are frequently nasalized or pronounced long. The sounds *f*, and *th* do not occur, but *r* is found in a few instances: *Purumih*—*boiling water*; *nagayariyu*—*to kill*. No monosyllabic term occurs with the list; the majority of words are made up of two syllables, and the above word, *to kill*, is one of the longest. The numerals are as follows: 1, *imba*; 2, *apu*; 3, *asu*; 4, *ajou* (Spanish, *j*); 5, *huësu*; 6, *majuô*; 10, *giy'a*. Of other terms, we mention: *hair*, *tasu*; *head*, *éhec*; *blood*, *edi*; *tooth*, *siñu*; *nose*, *dähca*, *däca*; *mouth*, *danwa*, *daswa*; *neck*, *apa*; *arm*, *pahpa*; *heart*, *buñu*; *foot*, *nahcua*; *stone*, *sinu*; *water*, *hia*, *iya*; *land*, *earth*, *umba*; *fire*, *agu*; *white*, *mixa*, *tichu*; *red*, *manä*; *green*, *maxa*. A. S. G.

PROF. JOHN CAMPBELL, M. A., a follower of Dr. Hyde Clarke, has published two articles in the *Canadian Naturalist*, Vol. IX., Nos. 5 and 6, by which he intends to prove linguistic (and hereby also ethnic) affinity between the Accad or Sumerians and the Cognate Khita or Hittites on the Orontes River, Tyria, on one side, and a large number of Asiatic, African and American nations on the other. By comparative vocabularies submitted in these two papers, "Hittites in America," he, with Clarke, endeavors to substantiate the theory that such tribes as the Iroquois, Cherokee, Chibcha, Quicchua, Araucanians, and many others, *had lain on the line of the Khita migration*. Hyde Clarke's discovery, he says, bids fair to revolutionize the science of ethnology, and it will do so certainly with those who can find any affinity between *gau*, *red*, in Karien (Farther India), and *sha*, *red*, in Dakota; or between *khosu*, *hair*, in Karien and Zye Chibcha, or *chuccha*, *hair*, in Quicchua, without any further etymologic proofs furnished.

THE *Philological Society* of St. Petersburg has made an application to the government for a yearly grant of 3000 rubles, to enable it to extend its operations in Central Asia.

THE New Testament has just been translated into the *Kashmir* language by the Rev. T. R. Wade, an agent of the Church Missionary Society in Kashmir, India, and he is now engaged in preparing a translation of the Book of Common Prayer, and a grammar of the same language. Kashmiri is an inflecting language, and, together with Nipalee, Pendshabee, and the dialects of Dadi-stan, etc., forms the northern group of the modern languages derived from Sanskrit. This northern group of dialects has experienced a considerable admixture of Arabian and Persian elements.

ORTHOGRAPHIC REFORM is not so much needed in the German language as in French and English; but the German state governments have nevertheless felt the necessity of changing it after scientific principles. Saxony is introducing in the primary schools a list of orthographic rules, and of words corrected accordingly, compiled by School Superintendent Kockel (published by A. Huhle, Dresden; price,  $\frac{1}{2}$  mark.) The system embodied in this book conforms almost entirely to the new Prussian and Bavarian system of reformed orthography. The Bohemians have reformed the orthography of their sonorous Slavic dialect at the beginning of this century; but as to the English language it is hard to see how reform shall be brought on, since the government of Great Britain does not meddle with "private matters" like these, nor does America with her "States-rights."

## GENERAL REVIEW.

### EXCAVATIONS AT OLYMPIA.

\*The *Moniteur of the German Empire* publishes the following 28th Report on the Excavations of Olympia:

"After a pause of four months and a half, during the summer, the fourth season of work commenced on the 16th Oct. last, with a force of about two hundred and fifty workmen.

While the excavations of the winter particularly aimed to disclose the North of the Altis, with all its varied structures, the present period of labor is designed especially to uncover the portion east and south of the sacred enclosure. The work on the south is destined to define more precisely the southern limits of the altis, which contained the large portal for solemn processions, and also to throw new light on the sanctuary of Hippodomia, and on the numerous buildings which extend beyond the second grove to the banks of the Alpheus. On the east, search was made for the eastern wall of the Altis, two colonnades mentioned by Pausanias, and the Stadium; on the north-west for the Prytaneum and the Gymnasium.

The first strokes of the pick revealed, on the north-east corner, between the Neraion and the north gate of the Altis, the remains of an ancient structure which has been recognized as the Prytaneum of the Eleases. According to the descriptions of Pausanias, this building contained a large banquet hall where the Olympic victors were entertained, and also a sanctuary of Vesta, with an altar for sacrifices, from which the embers used to be carried to the great altar of Jupiter. At the time of the destruction of Olympia not even this structure was spared, and yet the ancient plan of it, as far as the debris has yet been removed, can be distinctly seen. Around a large hall as a center are grouped several chambers, in one of which are still found large fragments of two mosaic floors. The front of this building has a hall with Doric columns, two of which are preserved in place. According to the form of their capitals, these columns belong to the best period of Greek art, but they have a breadth of axis disproportionate to their diameters, a feature not found in any other Doric structure.

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\*Translated by Prof. J. E. Hendrickson, of Beloit College.

## EARLY HISTORY OF ARIZONA.

The *Scientific and Mining Gazette*, San Francisco, Cal., in an article on this subject, says:

The early history of Arizona has still to be written, but it is in most respects identical with that of southern California, New Mexico and northern Mexico. That the original inhabitants belonged to the same civilization as that under which Mexico rose to so comparatively high a grade long before Cortes landed on its shores, is usually conceded, but whether the bulk of the people removed southward toward the consolidated empire of the Aztecs before the conquest of Mexico by the Spaniards; whether they remained and were swept away by the Spanish invasion from the south; or whether the Apache from the north drove them out of the open lands into the recesses of the canyons, and finally extinguished all but the few pueblos still remaining, is not certainly proven.

Probably the truth lies between the three alternatives, and all the causes may have contributed to the depopulation of the country and to the ruin of the extensive cities, dwellings, canals, etc., which strew the plains and line the sides of the canyons. To the student of history nothing in Arizona equals in interest these architectural remains. Now that the railway is finished, many of these are comparatively accessible—the famous Casa Grande being only a few miles from the station of that name, while numerous other ruins exist in the districts around Florence and Phoenix.

A few miles from Phoenix are the ruins of two or three towns and the remains of two stupendous canals, one of which is 40 feet wide, and in former times drew its supply of water from the river near the mountains, 20 miles distant. In this neighborhood are also the ruins of a building occupying a parallelogram of 26 feet by 130, with walls still over 10 feet high. At from 12 to 14 miles of Phoenix, at La Tempe, are remains of what must have been a populous city, and also another system of canals and reservoirs. Ruins of a similar description to those of Casa Grande have been found in the Rio Verde valley, on Pueblo creek and at Aztec pass.

Casa Grande, discovered by Father Kino, 300 years ago, is situated near the Gila, a few miles from Florence. The main building is about 55 feet square, and four stories in height, with traces of two more stories. Each story contains five rooms, two 35x10 feet, the other three 24x9 feet, and all of them 9 feet in height. The openings which once served for doors are three feet and one-half high, two and one-half feet wide at the base, and two feet wide at top. The whole of the interior is neatly plastered, the plaster perfect as when first put on. This building is surrounded by a wall which, when perfect, was perhaps fifteen feet high and six feet thick at the base, and within this are several smaller apartments, besides a sort of watch tower at the southeast and southwest corners.

In the Gila valley, 120 miles from Tucson, are the famous Piedras Pintadas. A heap of rocks, about 50 feet high, is covered with rude figures, geometric, comic, anatomical. Here are squares, circles, crosses, triangles, snakes, toads and vermin; men without heads and dogs without tails. The sketches show considerable similarity to those of the Aztec Calendar Stone in Mexico. It is a tradition with the Indians that those stones were put there in the time of Montezuma, to record treaties between different tribes.

The towns of the Moqui and Zuni, the former in the north of Arizona, and the latter just over the border in New Mexico, are in so many respects similar to the ruins scattered on plain and canyon, that they evidently belong to the same civilization; but whether the Indians are the remains of a separate tribe, or the remnants of many tribes, is one of the problems of the history of America.

The "Indians" of Arizona evidently belong to several very different stocks. The wild Apache, formidable for his stealthiness and treachery more than from his numbers; the peaceful, not easily provoked, yet brave Pimo; the industrious Papago; and the town-dwelling, family-loving, orderly, clean and self-contained Moqui, have little in common. The distance which separates the rude Apache from the Moqui, with his old and respectable civilization, is as great as that between the rude tribes of Siberia and the cultivated Japanese.

The ruins in the canyons, on almost inaccessible terraces, are believed, by Major Powell, to be more recent than those of the plains. He believes the people took refuge there to escape the Spanish incursions.

### THE EXPLORATIONS IN MEXICO.

*The North American Review.* The three last numbers of this magazine contain articles on the expedition to Mexico. The first is by the editor, Mr. A. T. Rice, being a brief review of the subject; the other two by M. Desiré Charnay. It may be said that no more interesting field of research can be found than in that very region where the first conquest of America began. Although it has been frequently visited by antiquarians and travelers, yet at each successive visit it has not failed to furnish some new and valuable discovery. One can hardly realize the surprise which was excited throughout all Europe when the marvelous tales of the untold wealth and strange civilization began to be told; but that surprise has not yet ceased. The Spanish conquerors left a large proportion of the most interesting ruins and monuments undiscovered, and so the various expeditions sent there have each brought to light new things. It was as late as 1750 that a party of Spaniards stumbled upon the so-called Casas de Piedros, now known as Palenque. In 1786 the first expedition was sent out by the king of Spain, under Captain Del Rio. Another was sent by Charles IX., under Dupaix, which lasted three seasons, until 1805-6. Later, Lord Kingsborough published his celebrated work, which, however, gave no new facts, being mainly a rehash of Dupaix. Then followed Walddeck's expedition, which lasted over two years. But the most important of all was the work of the American travelers, Stephens and Catherwood. Over forty ruined cities were visited and described by these indefatigable men, and their description still continues the most charming and graphic of any published. Since then Mr. E. G. Squier has visited the same region, and more recently various gentlemen, among them Mr. Stephen Salisbury. Mr. Scherzer, Rosini and others, have described the same regions. The natural museum of Mexico is also sending out quarterly reports in the Spanish language descriptive of many of the antiquities of this and the regions around the city of Mexico.

The work of M. Desiré Charnay thus far has been to give only a description of the various inscribed stones hitherto discovered, and the latest interpretations which the best scholars have put upon them, and nothing particularly new has been developed. The readers of *THE ANTIQUARIAN* will recognize in the first article the same facts which have been published in that journal in regard to the interpretation of the Mexican Calendar stone, and the other facts are also familiar; yet it is to be hoped that as the expedition continues, much new and valuable information may be obtained.

### THE GROWTH OF SCULPTURE.

*Cornhill Magazine* contains an article by Grant Allen, quoted also by *Appleton's Journal* for November, upon the growth of sculpture, which has some very suggestive points. From the point of view generally adopted by the æsthetic world, Egypt and Assyria are the absolute beginning of every earthly art of science. But with the rapid advance and anthropology and of what may be called prehistoric archæology, it has become inevitable that we should look farther back for the origin of things. We must push back our search far beyond the days of Sennacherib and Rameses to the nameless artists who carved the figures of animals upon bits of mammoth tusks, under the shade of preglacial caves. We must consider the Egyptian and Assyrian sculpture not as rudimentary works, but advanced products of higher developed art. The author touches upon sundry and necessary stages of early and imitative art. First, the Polynesian, and many other savages, have not progressed beyond the *full face* stage of human portraiture. Next in rank comes the drawing of a profile, as we find it among the Esquimaux and the Bushmen. Negroes and North American Indians cannot understand profile; they ask what has become of the other eye. At this second degree may also be placed the representation of animals as the Esquimaux represent them—a single side view, with the creature in what may be called an abstract position; that is to say, doing nothing particular. Third in rank we may put the rudimentary perspective stage,

where limbs are represented in drawing or bas-relief as standing one behind another, and where one body or portion of a body is permitted to conceal another, of whose primitive peculiarities the Egyptian wall paintings and Etruscan vases will give us a fair idea. An Egyptian or Assyrian pond always consists of a square diagram of some water, surrounded by diagrams of trees pointing outward from it in every direction, so that some of them are placed sidewise and some of them upside down.

Corner figures, like those of the Assyrian bulls and gods, give us the earliest hint of the statue. At first, seated or erect, with arms placed directly down the side to the thighs, and legs united together, the primitive statues formed a single piece with the block of stone behind them. Becoming gradually higher and higher in relief, they at last stood out as almost separate figures, with a column at the back to support their weight. At last they assumed the wholly separate position. Side by side with these changes, the arms are cut away from the sides, and the legs are opened and placed one before the other. Gradually more action is thrown into the limbs and more expression into the features, till, finally, the cat-faced Egyptian Pasht, with her legs firmly set together and her hands laid flat upon her knees, gives place to the free Hellenic Discobolos, with every limb admirably molded into exact imitation of an ideally beautiful human form, in a speaking attitude of graceful momentary activity.

The author takes the position that there are three things which have had an effect on the growth of sculpture: 1st, the law of heredity; 2d, the physical environment; and, 3d, the material for sculpture. To put the concrete instance, Egyptian sculpture was what we know it to be, first, because the people were Egyptians, that is to say, Negroids; secondly, because they lived in Egypt; and, thirdly, because they had no stone to work in but granite or porphyry. Conversely, Hellenic sculpture was what we know it to be, first, because the people were Hellenes, that is to say, Aryans; secondly, because they lived in Hellas; and, thirdly, because they worked mainly in white and fine-grained Parian marble.

Now, the Negroid race has never displayed much plasticity of intelligence, and has only produced a civilized nation in its extreme northeastern branch, where it spreads over the rich alluvial valley of the Nile, and borders most closely upon the Semitic and Aryan races. Somewhat similar is the position of the great Mongoloid family, which has developed a civilization in China alone, among the fertile plains of the Hoang-Ho and Yangtze-Kiang. Both these races seem to represent an early checked development. Each race is what it is, partly in virtue of the peculiar brain and the correlated individuality handed down to it by descent from its remotest human ancestors.

Here the second element steps in to complicate the account. At the moment when our investigation begins, the main center of civilization lay around the eastern Mediterranean. The other isolated civilizations—India, China, Mexico, Peru—had, some of them little, and others no connection with the Egyptian, Assyrian and Hellenic culture.

While we allow that the Aryan blood of the Hellenes had much to do with the differences which mark them off from the Negroid Egyptians, must we not equally grant that Hellenic civilization would have been very different if the settlers of Attica had happened rather to occupy the valley of the Nile, and that the Egyptians would have become a race of enterprising sailors and foreign merchants if they had chosen to make their homes on the shores of the Cyclades and the Corinthian Gulf?

As soon as man had passed the stage of the mere hunter or shepherd, he necessarily made his first essays in tillage on the rich levels watered by the Indus, the Ganges, the Euphrates, the Hoang-Ho and the Nile. Now, Egypt was specially marked out, even among such alluvial plains, as the natural seat of a great empire.

Developing freely at first, apart from foreign interferences, the Egyptian community produced its own social system and its own artistic school, in accordance with its own genius and the genius of the place. The richness of the soil permitted the reaping of harvests far greater than sufficed for the cultivators' use; but those harvests, instead of being exported (as at later dates) to feed the masses of Rome or England, were used to support vast bodies of native workmen.

Thus Egyptian painting, sculpture and architecture became wholly subservient to the royal pleasure, and the two former arts grew up simply as accessories to the latter in the decoration of the vast royal buildings.

We now arrive at the third element in the evolution of Egyptian plastic art—the material with which it had to deal. This, I believe, is one of the most important factors in the whole problem, and yet it is the one most persistently overlooked. The idealists who write so glibly about the national character of Egypt and of Greece forget that even an Athenian sculptor could have done little with the hard granite masses of Syene, while even Egyptians would in all probability have produced far more truthful and natural works if they had always dealt with the fine and plastic marble of Paros and Pentellicus. It is not too much to say that Egyptian sculpture has been profoundly modified by the abundance of granite, Assyrian sculpture by the abundance of alabaster, and Hellenic sculpture by the abundance of marble.

I do not for a moment mean to deny that the national character, formed by the national circumstances, did much to determine the low grade of development in Egyptian plastic art; but I think it almost certain that the nature of the material also reacted upon the national character with considerable effect. Then, again, as most of the highest architecture had also granite or sandstone for its "physical basis," the whole national art could never attain the plasticity of Hellenic genius—could never reach the grade of development which was naturally reached in the free and gracious marble temples of Ionia or Attica.

When we turn to Assyria, we arrive at a sort of intermediate stage between Memphis and Athens. Judged by the imitative standard, the plastic art of Nineveh is decidedly in advance of that of Egypt.

"Assyrian art," says Lubke, justly, "is distinguished even in its earliest works from the Egyptian, by greater power fullness and roundness in the reliefs, by a fresher conception of nature, and by a more energetic delineation of life; but it lacks, on the other hand, the more delicate sense of form and the stricter architectural law that marked the other."

The valley of the Tigris, like that of the Nile, naturally gave rise at an early period to a great semi-civilized agricultural community. But the Assyrians were a Semitic people, and the difference of race counted for something in Mesopotamia, even as it has counted for something among the monotonous flats of Upper India. In addition to this primary differentiating cause, there was a second cause in the physical conditions. Assyria is not so wholly isolated as Egypt. Though an inland country, it is not utterly cut off by the desert from all mankind, and compelled to mature its own self-contained civilization within its own limits like China or Peru.

The great river formed a highway for communication with the kindred culture of Babylon, while lines of commerce connected the Assyrian capital with the Phœnician, Hellenic and Hebrew worlds, as well as with the primitive Persian, Median and Indian empires. Hence, while the type of organization remains, as in Egypt, military and despotic, there is more individual thought and action among the people.

"Strata of alabaster abound in Assyria." This geological fact gives us the one remaining point necessary to the comprehension of Ninevite work. Starting thus from the same primitive basis as the Egyptians—the incised bas-relief painting—it is easy to see how the nature of their material, combined with the greater freedom of their intellects, led them soon to higher flights.

The features display a Negroid type, which, perhaps, points back to Egyptian models, and the treatment is far more angular than in later works. One of the lions—a corner statue forming part of a slab flanking a doorway—has a curious peculiarity which marks transition from a still more ancient and conventional style to a comparatively free and modern treatment. It has five legs. Four of these are visible as you view the animal in profile, and they are placed one behind the other, as though the creature were advancing; but two are also visible in front, one being the foremost of the previous four, and the other an abnormal fifth leg, which gives it the appearance of standing still when viewed from this aspect. Evidently the sculptor could not reconcile his mind to giving up the proper complement

of legs from any point of view, and so compromised the matter by running two contradictory conceptions into one.

But no place could better illustrate the importance of material than Babylon. More commercial and probably more civilized than Nineveh, Babylon stood in the midst of a far wider alluvial plain, where no building material except brick was procurable. Marble, alabaster, granite, were all unknown. Building stone, Sir A. H. Layard tells us, could only be brought from a distance, and it consisted chiefly of black basalt from the Kurdish mountains, used for ornamental details alone. The city, as a whole, was built of brick and mud. Hence no plastic art ever developed in Babylon. Its ruins consist of mere shapeless mounds, inclosing colored enameled tiles and other traces of æsthetic handicraft; but sculpture utterly failed for want of a "physical basis." No doubt pictorial and industrial arts took somewhat diverse developments from those which they would have taken had the architectural style been more similar to that of the Assyrian capital. Tapestry seems to have been to Babylon what sculpture was to Athens and painting to Florence.

Turning at last to Hellas, we have to deal with a very different people, a different country, a different material. The Aryan Hellenes took with them to their island homes the same primitive intellectual, philosophical, and subtle minds which the Brahmans took to India and the Kelts to Ireland. All we know of the Aryan race shows us that it could nowhere be content with such a purely external life as that of the Egyptians and Assyrians. Men of that race must reflect more and feel more, and their art must, therefore, mirror more of their internal life. But these universal Aryan qualities are not by themselves sufficient to account for the specific Hellenic art. We must look for that in the physical peculiarities of Hellas itself.

Such I believe to be the true secret of the magnificent Hellenic nationality. It was an Aryan race, starting with all the advantage of the noble Aryan endowments; and it occupied the most favorable situation in the world for the development of navigation, commerce and free institutions, at that particular stage of human evolutions. It was the great emporium where met the tin of Cornwall, the gold of Iberia, the amber of the Baltic, the myrrh of Arabia, the Silphium of Libya, the glass of Egypt, the pottery of Phœnicia, the lapis lazuli of Persia, and the ivory of Ethiopia or the East.

Without going too deeply into the vexed question of the exact links—Phœnician, Hittite, Lydian and Ionian—which are variously supposed to connect Oriental with Hellenic sculpture, we may recognize the fact that the earliest Greek art started from the same primitive form as the Egyptian and Assyrian. The most ancient Greek bas-reliefs, like those from the temple of Assos now in the Louvre (for the famous Lion Gate at Mycenæ may possibly be the relic of a still earlier race), are thoroughly Assyrian in type, but far inferior in execution and imitative skill to the Ninevite works. In the marble monument of Aristion, at Athens, a bas-relief of the archaic type, we find a distinct advance. Though the hair and beard strikingly recall the stiff rows of Assyrian curls, the pose of the arms is natural and almost graceful.

All nations make themselves images of their gods in wood or clay, and where these materials are unattainable, in feathers, like the Hawaiians. Now, the earliest Greek gods were in wood, and from those doll-like wooden gods, as has often been noticed, descended the chryselephantine statues of Phidias, overlaid with ivory to form the face and limbs, and with gold to represent the drapery. It is quite in accordance with the usual archaism of all religious usages that these essentially wooden statues continued to the last the representatives of the chief gods in the most important temples—the protecting Athene of the Parthenon, and the Pan-Hellenic Zeus of Olympia. Nor is it a less striking fact that the chryselephantine statues seem always to have retained some traces of archaic conventionalism; that their drapery hung in folds which concealed the whole figure; and that the Zeus of Olympia himself, the most reverend god of universal Hellas, was represented, like most very ancient statues, in a sitting attitude. It is the glory of Hellenic sculpture that it ventured even



in its gods to discard the sacred forms sanctified by antique usage; yet, even in Hellas itself, some traces of the conservatism natural to religion must inevitably be expected to exist. But the marble statues that form, after all, the real symbol of Hellas, are the lineal descendants of the bas-reliefs, and so had a purely architectural origin.

The archaic marble colossi, from Miletus, in the British Museum, represent Hellenic sculpture in an almost Egyptian stage, the stage in which Hellas received the rudiments of art from Assyria. The figures are seated in the attitude which we all know so well as that of Pasht. "They are stiff and motionless, the arms closely attached to the body, and the hands placed on the knees; the physical proportions are heavy and almost awkward, the execution is throughout architecturally massive, and the organic structure is but slightly indicated." The drapery wholly conceals the human form. There is not a touch in these ungainly figures which at all foreshadows the coming freedom of Greek art. They are simply conventional, and nothing more. But the ancient sitting statue of Athene preserved in the Acropolis at Athens, though much mutilated, shows an immense advance. The attitude is unconventionalized; the foot, instead of being planted flat as in the Miletan colossi, is lightly poised upon the toes alone; the limbs are partially uncovered, and the undulating folds of the drapery are clearly prophetic of the later Athenian grace.

We have reached the point where Hellenic sculpture has attained to perfect imitation of the human figure; its further advance is toward the higher excellence of ideality, expression, deep feeling and perfect appreciation for abstract beauty of form.

While in Egypt, as we saw, the regal and hieratic influence caused the primitive free manner to crystallize into a fixed conventionalism; while in Assyria it checked the progress of art and restricted all advance to a few animal traits, in Hellas, after the age of freedom, it became powerless before the popular instinct. While Egyptian and Assyrian gods always retained their semi-animal features, in Hellas the cow-face of Here and the owl-head of Athene fell so utterly into oblivion that later Hellenic commentators even misinterpreted the ancient descriptive epithets of the Achaean epic into *ox-eyed* and *gray-eyed*. But it was on the gods, as the common objects of devotion for the whole city, that the art of the republican Greek states mainly expended itself.

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## BOOK REVIEWS.

THE ORIGIN AND GROWTH OF RELIGION, AS ILLUSTRATED BY THE RELIGION OF ANCIENT EGYPT. By P. LE PAGE RENOUF. The Hibbert Lectures for 1879. New York: Charles Scribner's Sons, 1880.

The theory of M. Renouf, the author of this book, is substantially that avowed by Max Müller, in his *Chips from a German Workshop*, namely, that nature-worship lies at the foundation of religion, and that every term for God signifies in the Egyptian, as the Hebrew and Assyrian, might or force. "The Egyptian 'Nutar,'—God—never became a proper name, but was applied indifferently to each of the powers which the Egyptian imagination conceived as active in the universe," and "the extremely common Egyptian expression Nutar Nutra exactly corresponds in sense to the Hebrew *El Shaddai*. The immediate perception of the infinite, "sensus numinis," is an intuition as irresistible as the impression of the senses.

The Egyptian religion was founded on mythology, but all phenomena which attracted sufficient attention, furnished matter for myths. Their mythology is also very similar to that of the Indo-European races, yet the religion of Egypt was not derived from either the Semitic or the Indo-European races, but was developed on its own soil.

This idea, however, that the Egyptian was a kind of nature-worship, is not altogether new, for Origen, speaking of this allegorical interpretation,

says: "They will, nevertheless, teach us to offer divine worship to cold water and the earth, which is subject to men and all the animal creation." The worship of animals which prevailed in Egypt, the author thinks, arose from the use of these animals as the symbols of the Gods. The worship of Apis was indeed as old as the pyramids, but immeasurably greater devotion to the sacred animals appeared in the later times. One thing the author asserts, which is worthy of notice, and that is, that the resemblances between the Hebrew and the Egyptian institutions were purely external, but that there was no transmission of ideas. The assertion that Moses derived his conception of God, as the "I am that I am," from the Egyptian, he thinks is not well founded. The Golden Calf has been supposed, but on no sufficient grounds, to represent Apis. The worship of oxen, as symbols of divine power, is not peculiar to Egypt, but is met with in all the ancient religions.

The work, aside from the peculiar theory of the author, is suggestive, and contains much new and interesting information in reference to Egypt, and especially in reference to the religious books of Egypt.

THE ELEMENTS OF THE HEBREW LANGUAGE. By Rev. A. D. Jones, A. M. Andover: Warren F. Draper, 1870.

Probably one reason why so little attention has been paid to the study of Hebrew heretofore, has been the prevailing idea that it is a hard and disagreeable language to acquire. If this is so, the elaborate and formidable Hebrew grammars have not aided very much in removing the impression. Any effort, therefore, which can be made to simplify the study, and to make the acquirement of the language an easier task, must be very welcome. The object of this book is just that, to make the study of Hebrew easy for beginners. There is no doubt that this important branch of oriental study has been too much neglected, even by clergymen. It is said that clergymen generally read the Hebrew Bible with the help of the English translation the first year after graduating from the Seminary; the second year they can barely remember the Hebrew alphabet, and the third year they are ready to sell their Hebrew books. It may be of advantage to such to know that they can again take up the study without the trouble of wading through so much "daghesh forte" and "daghesh lene," or "chateph pat-tach," and so we advise them to purchase this elementary book and begin anew the study of their Bibles in the original tongue. It is proposed by the author that the study of Hebrew be introduced into schools and colleges, and that the taste for the language be acquired earlier in life. If this were done, an elementary book like the one prepared by Mr. Jones would be very essential, and it is perhaps fortunate on that very account that the work has been prepared.

A FORBIDDEN LAND; VOYAGES TO THE COREA, WITH AN ACCOUNT OF ITS GEOGRAPHY, HISTORY, PRODUCTIONS, AND COMMERCIAL CAPABILITIES, ETC., ETC. By Ernest Oppert. With two Charts and twenty-one Illustrations. New York, G. Putnam's Sons, 1880.

We have here a work finely gotten up, rather interestingly written in poor English, on a fresh subject. The author seems to have resided in the far east, and to be well posted in Chinese history and literature. Without being directly engaged in commerce he undertook to secure the opening of the long closed Corea to the outside world. The earlier chapters of the book relate to the physical aspects of the country, its inhabitants and their history, while the last part of the book is given up to an account of three voyages to the land by Herr Oppert.

In the most easterly part of the Asiatic continent, Corea is separated from China by the Great Galon river, and the formidable whiteheaded mountain range. It was the scene of sanguinary and murderous feuds between its various races and tribes for several thousands of years, as we learn by Chinese history. It has been generally supposed that Corea was to some extent subject to China. It is certain that in olden time the Chinese emperors did claim and attempt to exercise suzerain powers over the Korean rulers. To establish that right, they many times invaded the land, but in 1397, a noted leader succeeded in uniting all the provinces, or petty kingdoms, under his authority, and drove out the invaders; since then, the Coreans have been independent of China, and carefully isolated from the

rest of the world. When shipwrecked seamen have been thrown on that coast, they have been frequently massacred. Such was the fate of the crew of the American schooner, "Gen. Sherman," in 1866. The author claims to have good authority for declaring that these deeds, and the policy which dictates them are not of the people, but from the tyrannical government of which the great mass of the people are heartily tired.

In regard to the inhabitants of the land the author says: "It may be taken for granted after this, that the opinion generally prevailing hitherto, according to which the Coreans have been set down as a branch from the Chinese people, must be considered as altogether mistaken and erroneous."

There seem distinct traces of two races among them at present, and their habits and customs show them not to be of Chinese extraction, for a people so obstinate and tenacious of custom as the latter, would not have so completely changed, and that too in a land bordering China, as the Coreans have done if they are descendants of the Chinese. The best information on the subject leads scholars to believe that the mass of the people are from Mongolia, from which country they fought their way through China into the Korean peninsula, while that portion of the population who show the Caucasian type are probably from the plains of western Asia, "whence they have been driven by feuds and revolutions."

The government is an absolute monarchy; the will of the king is law. But they have a singular officer termed the "declared or official favorite," "a position usually filled by some male member of a noble family, whose special duty consists in watching and controlling the royal actions. Formerly, this office possessed some significance; at present, it possesses none whatever." There are eight provinces, under the rule of governors; each province is divided into circuits, and these again into districts. All the officers are appointed for two years only, and then changed to some other post. This policy keeps the officers loyal to the king, and prevents any intimacy or attachments between the officials and the people. The policy leads them to be terribly unjust and extortionate, which does not seem to disturb the king if he secures his revenue. Two hundred years ago they had an elaborate system of secret police, who kept a watch over all officials. It seems to have worked well for a while, but like everything of the kind elsewhere, it became corrupt and useless for the purpose for which it was intended.

The population of the country is believed to amount to the enormous number of fifteen or sixteen million people. They are described as bright, peaceable, industrious, kind hearted, but sadly debased in morals. Many of the upper classes are real gentlemen in intelligence and manners. In astuteness and patient diplomacy, the officials resemble their neighbors, the Chinese. While China has no authority over Corea whatever, it has long served the Korean rulers to delay and defeat all negotiations on the part of foreigners, to declare that important questions must be referred to the emperor of China for decision. But it is now well understood that it is only an expedient to check their purposes. The people ardently desire intercourse with the outside world, but as yet have not had courage to assert their individuality enough to demand it.

In religion the people are Buddhists; but in practice they hardly rise above savages, being far below the Chinese and Japanese. Their priesthood is the lowest of their "displaced castes." The author thinks they must be the most depraved class of religious teachers in the world. In the latter part of the 18th century, several Coreans attached to the embassy at Peking were converted to the Roman Catholic creed; and Christianity, or Papal Christianity was introduced into the country, and spread fast. "Among all Asiatic nationalities there is none more inclined to be converted to Christianity than the Korean; he becomes a Christian from conviction, not from any mercenary motives." Our author praises the work of the Roman Catholic missionaries, and then makes the astounding statement, which must be news to many careful observers that "It is an undeniable fact, and everyone conversant with the matter, especially so far as China is concerned, must subscribe to it, that whatever success has been obtained is, for the greater part, due to the work of Roman missionaries." He confesses that this is largely due to "the outward splendor of the Roman Catholicities." In a foot note, he makes a partial apology for his state-

ment on the subject, and then emphasizes it by showing his ignorance still further. The whole, being contained in a book offered to a public which is mostly Protestant, is well nigh an insult to their intelligence. For the facts are believed to be notoriously on the other side. He shows plainly enough that the recent tyrannical policy of exclusion of foreigners in Corea was from the same cause as in China and Japan years ago; the Roman priest-hood intrigued for power, meddled with government, and some were beheaded and others bundled out of the land. And as showing the boasted wisdom of those religious teachers the author narrates an adventure which the Roman priest whom he praises the highest for learning, wisdom, and discretion proposed, and in which the author joined, which made a third voyage to "the forbidden land." The problem was, for the priest to get permission to return to teach his religion in Corea; and for Mr. Oppert to get the country thrown open to general commerce. The priest informed him that the present ruler of the country was a very superstitious man, and possessed certain relics which he sacredly prized and protected; and which he thought exercised a control over his destiny. These were deposited in a certain secluded place, which was well known to some of the Corean converts with the priest. He proposed that they land on the coast, march with a sufficient force as secretly as possible to the place, secure the relics and then make the ruler accede to their terms, as he thought he would certainly do. The Quixotic attempt was made and ignominiously failed, and only resulted in greatly exasperating the ruler.

The book contains much interesting material, but is not well digested. It is probably the best authority extant on Corea; and as such, will repay any one desiring information on the subject of which it treats. Mr. Oppert is probably a Frenchman, and wrote this work in English; perhaps this fact may account for the following remarkable sentence found on page 73. "He was overtaken by death, and his warlike career was put a sudden and unexpected end to." No one should ever laugh at an American's French after that specimen of bad English. We marvel that the Putnams should have allowed such a phrase to pass their press.

W. S. H.

MEMORIAL RECORD OF THE FATHERS OF WISCONSIN, containing Sketches of the Lives of the Members of the Constitutional Conventions of 1846 and 1848. Published by H. A. Tenney and David Atwood, Madison, Wis., 1890.

The State of Wisconsin was the fifth and last one into which the Great North-West Territory was divided. This territory, established in 1797, embraced the whole country east of the Mississippi and north of the Ohio river. Out of it Ohio territory was first organized and admitted as a State in 1802. Indiana Territory was then the name it took. Afterward, Michigan Territory organized in 1805, embracing Wisconsin and the region farther west; next Illinois, organized as a territory in 1809. Last of all, the territory of Wisconsin, organized in 1836. This territory comprised what is now Iowa, Minnesota, and half of Dakota. Iowa was organized as a territory in 1838, with Minnesota attached. Wisconsin was admitted as a State in 1848.

There were two conventions for the framing of a State Constitution, the first constitution having been rejected by the people. The members of these two conventions have been honored by certain gentlemen with a volume of brief memoirs, hence the title: "Fathers of Wisconsin," though the title would be as appropriate to the early missionaries as to the constitution framers. The compilers of these memoirs are H. A. Tenney and David Atwood. The volume contains 400 pages, and no less than 203 biographical sketches. It is fortunate that these surviving members have taken this method of perpetuating the names and memories of the constitutional founders of the State. With the disrepute that has been brought upon pioneer history and biography by the traveling swindlers who call themselves historians, and who will write the biography of any man who will pay for it, it seems a relief to have the work fall into respectable hands. No greater swindle has been perpetrated upon the citizens of the west than that by Williams Brothers and other parties, who have, for the last three or four years, been publishing so-called County Histories. We welcome this volume with the hope that it may be only introductory to others prepared by the citizens of the State, and made reliable by the reputation of the writers themselves.

*Contributions to the Archæology of Missouri by the Archæological Section of the St. Louis Academy of Science. Part I, Pottery. Geo. A. Bates, Salem, Mass., 1880. Folio, 30 pages letter press; 25 pages plates.*

For several years Archæological collectors and museums in this country have been exhibiting specimens of a unique kind of pottery in great numbers, and the information has been given that it was the famous New Madrid or Missouri pottery. This book contains a full description of the place and the pottery, and from it we have taken the following facts:

Prof. W. B. Potter describes the locality as follows: "From the Mississippi river, near the town of Cape Girardeau, a line of bluffs, at times bold and abrupt, and always well defined, extends in a general southwesterly direction across the southeast corner of the State and on into Arkansas. This forms the northern and western boundary of the so-called swamp region. The general surface of this region is but little above the mean stage of water of the Mississippi. It is broken up into a series of long and narrow tracks of sand, known as "Ridges," and intervening cypress swamps, through which small sluggish streams make their way, expanding at times, into open lakes, and further south into great bayous, connected with the present channel of the Missouri. The ridges are generally quite level; have an elevation of about 15 feet above the swamps, and the soil is very rich and has been cultivated in many places for more than fifty years. The length of the ridges is from thirty to forty miles and the width from three to ten. The lines of swamps and bayous between the ridges are from two to twenty miles wide, and twenty to forty long." This swamp region, it appears was once the abode of a numerous people, and the remains of extensive settlements have been discovered on these ridges, descriptions of which are contained in the volume. One peculiarity of these settlements is that they are generally surrounded by a wall which seems to have served the purpose of a levee as well as defense; and that there are still left numerous marks of the abodes of the people in the form of circular depressions, as well as the evidences of their high state of cultivation in the numerous specimens of pottery. These depressions have an average depth of 27 inches and a diameter of 30 feet. Within the walls and the mounds in which the pottery has been found afford unmistakable signs of permanent habitation. There are at least four of these settlements or ancient villages in one of the two localities visited, that is near New Madrid, Mo., and others near the town of Commerce. The mounds in which the pottery was found are situated on the borders of the ridges and are generally about 11 feet in height and from 120 to 150 metres in diameter. The pottery itself is made of a dark greyish clay, mixed with shells. None of it is glazed, nor does any of it bear trace of having been turned on the wheel. Most of the vessels are plain black. In some, the ornamentation is moulded in the clay, but does not differ in color from the rest of the vessel. In others it is painted in red, white or black, but not burnt into the clay but simply laid on. Over 4,000 specimens of this kind of pottery have been found and are now in the museum of the Academy of Science of St. Louis, in the Peabody Museum at Cambridge, Mass., or in the hands of private collectors, Prof. Potter, Dr. Engleman, H. N. Rust, and others.

The volume contains 24 lithograph plates, descriptive of the different forms, sizes and patterns, but contains no description in the letter press of either the specific forms or of the patterns except a very general one by Dr. Ebrist. Mound Builders' pottery is generally of a dark fine-grained clay, differing from the later Indian by its fineness and by its general finish. There is an intermediate stage of art manifested by it which distinguishes it from the Pueblo pottery of the west and the rude specimens of the eastern tribes, and which may be compared to that of the bronze period and the Lacustrine villages of Europe. The ornamentation so far as shown by the cuts portray none of the symbolism of the Pueblo or Mexican pottery, such as the modified form of the Greek cross, and of the Suastika or fire symbol of the far east.

The St. Louis Academy of Science deserves great credit for publishing so handsome a volume and presenting the facts in a permanent and valuable form.

COL. GARRICK MALLERY: *A Collection of Gesture Signs and Signals of the North American Indians, with some comparisons.* Washington: Government Printing Office, 1880. Bureau of Ethnology. F. W. Powell, Director. 327 pages, in quarto.

This instructive volume is a catalogue of gesture signs, disposed in the alphabetic order of the ideas expressed by the signs. The material brought together was derived (1) from different notices scattered through a large number of ethnologic publications on Asia, Australia, and other parts of the globe; (2) from six printed lists of signs in use among the North American Indians (Von Wied, Maj. Long, Burton, etc.), (3) from information sent by a large number of contributors living among Indians; (4) from information derived from Indians visiting Washington. The book contains the descriptions of a large variety of gesture signs, which cannot, as far as their number is concerned, fall much short of three thousand. The *tribal signs*, or signs made by Indians to designate tribes outside of their own tribe are of the highest interest for science, and had never been gathered before with such completeness.

A. S. G.

DR. H. C. YARROW: *Introduction to the Study of Mortuary Customs among the North American Indians.* Washington: Government Printing Office, 1880. Bureau of Ethnology, T. W. Powell, Director. 114 pages, in quarto.

This well-written introduction into a most interesting and extensive field of research, is only the precursor of a much larger illustrated work, prepared by the same author. There is no mode of disposal imaginable, which is not performed by some North or South American tribe on their dead, and hence the gain which psychologists can derive from this study is not to be undervalued.

A. S. G.

*Proceedings of the 11th Annual Session of the German Society for Anthropology, Ethnology, and Primitive History, at Berlin, August, 1880.\**

The published proceedings of this Society, at its recent session, have come to hand, from which we gather the following details:

The session was opened by the President, Prof. Dr. Virchow, who was followed by Herr Friedel, in an address of welcome, and a paper on the Antiquities of Berlin and its Environments. The order of the day was then changed to give the Crown Prince and Princess the opportunity to listen to Dr. Schliemann's accounts of his discoveries on the site of ancient Troy. The President also made an appropriate tribute on the occasion of the death of M. P. Broca, general secretary of the French Anthropological Society. Prof. Ranke, general secretary of the German society, gave a detailed account of the society's labors and publications during the past year, with brief notices of recent works published by individuals, relating to Anthropology and Prehistorical Science. Papers were read also from Herr Schaaffhausen, on Craniology; by Herr Friedel, on the Prehistorical Epoch; by Herr Handelmann, on the Ancient Town-Walls and Citadels of Schleswig-Holstein and its surrounding districts; by Dr. Koehl, giving an account of discoveries in an ancient cemetery of the Merovingian period, situated near Worms; by Dr. Mehlis, on the antiquities generally of the Merovingian and Karlovingian times. A general discussion followed, on the subject of ancient styles of ornamentation of urns, vases, etc., which completed the scientific work of the sitting.

Pres't Virchow opened the fourth sitting with some remarks on race-statistics in Germany, being followed by Dr. Kollmann, on color-statistics in Switzerland, including some remarks on craniology, etc. A discussion on pottery ornamentation succeeded. Dr. Tishler closed the sitting with a paper on the products of explorations in the cemetery of Dolkeim, near Königsberg.

A communication from Prof. Fraas was read, on the subject of Anthropological, Ethnological, and Prehistorical *Maps*. The Antiquities of Regensburg, where the next general session is to be held, were briefly outlined by Herr Dahlem. Herr Wurmbrandt presented a paper on the Etrusco-Roman period in Eastern Hungary.

Herr Bastian spoke of his recent scientific travels in Polynesia, etc., and upon various other topics. Dr. Henning then presented a paper on the ancient Runic characters. Dr. Undset described the remains of certain grave-hills in Norway, the burial-places of the ancient sea-kings. A ship

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Translated from the German and reviewed by O. D. Miller.

some 75 feet long was found buried in one of these hills. Prof. Schaaffhausen described the remains of several caves, making extended remarks upon the cave-period.

Dr. Brugsch-Bey was introduced, who presented his views on the early Egyptian period. Having devoted forty years to Egyptian studies, residing in Egypt twenty years, Dr. Brugsch felt himself qualified to speak upon Egyptian antiquities. Existing monuments carry us back to the period at least 4000 years B. C., a period parallel, perhaps, with the stone and bronze ages in Europe. The Egyptians, with their gods, came from Asia, and when they entered the Nile valley, were in a high state of civilization. No proofs exist in Egypt of a succession of the stone, bronze and iron ages. Iron was in common use in the earliest monumental period, that of the great pyramids, while stone implements are found in the tombs of the latest epochs. Dr. Brugsch held that the stone implements which have been found in Egypt really are not such, are not the work of man. Dr. Lepsius was cited to this effect, but it seems that Dr. Lepsius admits the existence of stone implements, but denies that they prove the existence of a stone age in Egypt. They seem to have been in use during all the historic periods. Dr. Brugsch's views on these points were contested by several members present. But Herr Archcherson stated that flint-stone is extensively worked in Egypt, even at the present day. Remarks by several members succeeded those by Dr. Brugsch. Herr Ecker offered statistics respecting the influence of locality upon the corporeal size of men, showing that high, mountain districts produce the largest sized men. Herr Kollman followed in extended remarks upon European craniology, presenting various tables illustrative of the different types of skulls. Herr Kupffen made some remarks respecting the cranium of Em. Kant, the philosopher. This being the last sitting, the session was then closed by appropriate remarks by Pres't Virchow.

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#### BOOKS RECEIVED.

*Inaugural Address of the Right Hon. Lord Aberdare, F. R. S., President of the Royal Historical Society*, delivered on the 14th Nov., 1878.

*Metropolitan Museum of Art. Tenth Annual Report.*

*Western Reserve and Northern Ohio Historical Society. Tracts No. 51-52.*

*The Numismatic and Antiquarian Society of Philadelphia. The Remains of an Aboriginal Encampment at Rhehoboth, Delaware. A paper read before the Society Feb. 5th, 1880, by Frances Jordan, Jr., Philadelphia, 1880.*

*American Oriental Society Proceedings. May, 1880,*

*Archæological Explorations by the Literary and Scientific Society of Madisonville, Ohio.*

*Hittites in America*, by John Campbell, M. A., Prof. in the Presbyterian College, Montreal. From the *Canadian Naturalist*, Vol. IX., No. 5.

*American Journal of Numismatics and Bulletin of American Numismatic and Archæological Societies.* New York, Vols. 1, 2, 3 and 4.

*Archæological Institute of America. First Annual Report of the Executive Committee, 1879-1880, presented at the annual meeting of the Institute, Boston, May 15th, 1880. Cambridge, 1880.*

*On the Origin of some American Indian Tribes*, by John Campbell, M. A., from the *Canadian Naturalist*.

*The Geology of Morrison County.* From the Sixth Annual Report of the Geological and Natural History Survey of Minnesota, by H. N. Winchell, State Geologist, Minneapolis, 1878.

*The Correct Arms of the State of N. Y.*, as established by law since March 16, 1778. A historical essay read before the Albany Institute Dec. 2, 1879, by Henry A. Homes, LL. D., of the State Library, Albany. 1880.

*Notes on Anthropology.* By Prof. O. T. Mason. From the *American Naturalist*, 1880.

*Early Chapters of Cayuga History—1656-1684.*

*Latin Pronunciation.* By S. S. Haldeman, LL. D., Prof. of Comparative Philology of the University of Penn. Reprinted from *Stoddart's Review*.

# The American Antiquarian,

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Published in Chicago, Illinois, by JAMESON & MORSE.  
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The AMERICAN ANTIQUARIAN commences its third volume under favorable auspices.

The magazine will be under the same control as heretofore, the business management being in the hands of JAMESON & MORSE, 164 Clark St., Chicago, Ill., to whom all subscriptions should be sent, the editorial work being under the charge of Rev. STEPHEN D. PEET, of Clinton, Wisconsin. The same variety will be given in subsequent numbers, including Contributions, Correspondence, Editorial Notes, and Book Reviews, and in addition, a special place will be given to the general review of the Literature of Archaeology, the review being mostly made up of gleanings or quotations from recent books and magazines.

We are expecting some valuable contributions in the line of Aboriginal History, and Early Explorations, also upon Native Traditions and Mythology, and shall endeavor to keep our readers informed in the progress of discovery in the United States, Mexico, and other countries. Our hope is that in the future more attention will be given by our contributors and correspondents to the topographical and geological surroundings and the distinctive points in the relics and monuments and other tokens of each locality, so that an intelligent view may be gained of the whole paleography of this continent. The comparison of American with foreign relics, and a description of their uses, as well as a more general history of the prehistoric and historic arts and inventions, will also be desirable.

The same associate editors will continue to have charge of their special departments, Linguistics being assigned to Mr. A. S. Gatschet; Pre-Columbian History to Prof. R. B. Anderson; and Anthropological News to E. A. Barber. Other gentlemen have also engaged to furnish notes and reviews. Prof. John Avery, of Bowdoin College, having consented to furnish items concerning India; Rev. O. D. Miller favoring us with frequent communications on Assyriology; and Rev. Selah Merrill, D. D., of Andover, making his specialty the Archaeology of Palestine. We are happy to announce that many valuable contributions have already been received. We have no doubt that the Magazine will continue to give as good satisfaction as heretofore, and we predict for it a successful and prosperous future. Subscribers will remember that our terms are \$3.00 per Year, *Strictly in Advance*, and favor us with prompt remittances.

STEPHEN D. PEET, Editor.

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## TESTIMONIALS.

Its plan is intelligent and comprehensive.—*Literary World*.

Devoted in all sincerity to honest and thorough work, which is performed with ability and zeal, discussion also being free, with truth as the object.—*The Churchman*, N. Y.

This serial is both interesting and able.—*Western Christian Advocate*.

Any intelligent American may take pride in this publication. It is truly a fact for congratulation that in the midst of our richest antiquarian region, a quarterly is published whose editor is on the continual look-out for discoveries to illustrate the prehistoric events of this continent, and to secure the services of the ripest pens to treat the facts of its ethnology and archaeology.—*Daily Inter-Ocean*.

Beautifully printed, as all the Transatlantic magazines are, the AMERICAN ANTIQUARIAN is a quarterly publication of especial interest. There is about our European, and especially our British archaeology a certain monotony. The novelty of our discoveries is losing its gloss, but Prehistoric America is to us a region of romance and wonder pretty similar to what the New World was to the Elizabethan mariners. Not the least interesting portion of the magazine is the correspondence, in which a number of writers accumulate much curious information regarding burial customs, and give valuable details respecting burial mounds in several parts of the States. THE AMERICAN ANTIQUARIAN deserves to be widely known among English readers.—*Liverpool Gazette*.



## THE AMERICAN ANTIQUARIAN.

## CONTENTS OF VOL. I, NO. 1.

- Ancient Garden Beds of Michigan, by Hon. Bela Hubbard. Illustrated.  
 The Discovery of Palæolithic Implements in the city of Reading, Pa. A. F. Berlin, Ill.  
 Mounds and Earthworks: Their Distribution and Localities. By Rev. M. Eells, Washington Territory; Rev. E. F. Buckner, D. D., Indian Territory; Horace Mason, Missouri; Ed. R. Quick, Indiana, and others.  
 Ancient Trails among the Rocky Mountains, by Wm. N. Byers, Colorado.  
 Ancient Trails in Ohio, by J. M. Woodruff, Ravenna, O.  
 Modern Indian Tribes among the Ancient Ruins of Arizona, by E. A. Barber.  
 Discovery of the Ohio River: A Description of a Collection of Old Maps, by Rev. Stephen D. Peet.  
 Observations on the Dighton Rock Inscription, by Dr. Chas. Rau.  
 Man in America More Ancient than the Mound Builders.  
 Discovery of an Ancient Venetian Medal near Starved Rock, Illinois, by Dr. J. A. Butler.  
 EDITORIAL NOTES—The Field and the Subjects to be Investigated.—Description of Cabernets and Earthworks Visited in a Trip during Last Summer.  
 CORRESPONDENCE—The Serpent Symbol.  
 DISCOVERIES—Skeletons in a Mound in Ohio. The Bones of a Mastodon, with Relics of the Stone Age, found in Ohio.  
 BOOK NOTICES AND EXCHANGES.

## CONTENTS OF VOL. I. NO. 2.

- A Comparison of the Pueblo Pottery with Egyptian and Greek Ceramics, by Edwin A. Barber. Illustrated.  
 Traditions of the Deluge, among the Tribes of the Northwest, by Rev. M. Eells.  
 Description of an Engraved Stone, by John E. Sylvester, M. D. Illustrated.  
 Prehistoric Ruins in Missouri.  
 Gleanings, by S. S. Haldeman. Illustrated.  
 Sketch of the Klamath Language, by Albert S. Gatschet.  
 The Location of the Indian Tribes of the Northwest Territory, by Rev. Stephen D. Peet.  
 Remarkable Relics—Leaf Shaped Implements, by Prof. M. C. Read.  
 Perforated Tablets, by R. S. Robertson.  
 EDITORIAL—Recent Explorations of Mounds. Proceedings of Societies. Anthropological News. The International Congress of Americanists. Book Reviews.

## CONTENTS OF VOL. I, NO. 3.

- Native American Architecture, by E. A. Barber. Illustrated.  
 The Phonetic Elements in American Languages, by Dr. R. J. Farquharson.  
 The Inscribed Stone of Grave Creek Mound, by Prof. M. C. Read. Illustrated.  
 Traces of Bible Facts in the Traditions of all Nations, by Rev. Stephen D. Peet.  
 Mythologic Text in the Klamath Language, with comments by A. S. Gatschet.  
 CORRESPONDENCE—The Davenport Tablets. Ancient Iron Axes. Comparative Grammar. Suggestions to Collectors of Ethnological Materials. The Serpent Symbol. Museum of Relics.  
 EDITORIAL—Anthropological News. Linguistic Notes. Recent Discoveries. Our Exchanges. Books Received. Book Reviews.

## CONTENTS OF VOL. I, NO. 4.

- The Emblematic Mounds of Wisconsin, by J. N. DeHart, M. D. Illustrated.  
 Shell Beds of Clatsop Beach, by H. B. Clarke.  
 A Comparison between the Archaeology of Europe and America, by Rev. S. D. Peet.  
 The Utes of Colorado, by N. C. Meeker.  
 Early Indian Migration in Ohio, by C. C. Baldwin. Maps.  
 An Exhibition of Indian Character, by W. L. Coffinbury.  
 Discourse of Dr. Paul Broca, translated by Prof. O. T. Mason.  
 Indian Music, by Rev. M. Eells. With the Notes of 24 Tunes.  
 Prehistoric Manufacturing Village in the Miami Valley, by S. H. Binkley.  
 CORRESPONDENCE—The Iroquois. Indian Mounds. Scientific Societies.  
 EDITORIAL NOTES—Discovery of Mound Builders' Skulls. Recent Literature. Anthropological News. Linguistic Notes. Ethnological Notes. Bibliography. Book Reviews.

## THE SOURCES OF INFORMATION AS TO THE PREHISTORIC CONDITION OF AMERICA.

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Read before the State Archaeological Association of Ohio, at Newark, O., September, 1876.

There are three ways of ascertaining the condition of society in the prehistoric period. The first is by tradition, the second by physical geography, and the third by archæology, or the relics and "remains of lost empires."

These three sources of knowledge are before us to furnish their description of the prehistoric times in America.

There are, however, some stages of society which tradition does not reach, and for these we either have to find a substitute to the first source of evidence or depend altogether on the others.

This is so in Europe and the older continents. There, there are certain ages of human existence of which no story remains; nothing but the land which was inhabited and the relics or ruins which lie buried deep in the soil or covered with the sands of the desert.

Civilizations have existed and passed away of which there is no tradition, nothing but the record of silent monuments. The site of Troy was occupied by a people preceding the Trojan, but even Homer knew not of this buried city, and no song celebrates its hidden wonders. Egypt, too, had a glory which departed, and the only record left was that contained in the monuments which have survived the "wreck of empires and the tooth of time." Nineveh and Babylon and the Chaldean Empire have left great heaps of ruins and many rude monuments; but around many of these silent ruins not even a myth lingers to echo the story of their departed greatness.

So in America, there are races which have passed away, leaving no record behind them, and the earliest period of human existence is here veiled in impenetrable obscurity. Not even the fragment of a tradition has floated down to us. We know that these races existed, for we have seen their foot-prints, but not an echo of their voice lingers; no fragments of their story are discovered. Their skeletons lie mouldering in nameless graves, and all the witness which we have is the speechless, grinning skull or the silent earth-mounds in which they lie buried. Their works, with the rude architecture which they practiced; their relics, with the traces of their art and handicraft upon them; or occasionally an emblem or symbol inscribed on some vase

or vessel, or built into some great earth-mound; these are all that they have left behind, but no record attends them. Their hieroglyphics, if found, are obscure, and no key is left for their interpretation.

There is, however, one method of approach to these obscure ages which may be substituted for this missing link of knowledge; a method which has been practiced in reference to the early cultus of the European nations. It is that of analogy, the analogy of history. To illustrate: The Etruscans of Europe have furnished difficult problems. They were once almost an unknown people. Their ethnic connection has been disputed. It is still a question whether they were Pelasgian or Tyrrhenian, Aryan or Turanian; whether their cultus came from the North and was a development of the savage races of the mountains, or from the South, transported from Asia or the East. History does not inform us. Their rude Cyclopean architecture, the traces of art, which reached so high a stage of development among them, and the rude inscriptions occasionally discovered, are still objects of wonder.

But the Etruscans are not now an unknown people. They have been studied until a fair degree of knowledge of them has been attained. How have we learned about the Etruscans? By the analogy of history. Men have reasoned from the known to the unknown. Their forms of architecture, their specimens of art, and the fragments of inscriptions, many and varied images, have been examined, and through known Aryan symbols upon them, or by the traces of Pelasgian divinities, or by the analogy of later languages, and with the aid of later history, they have come to be understood, and now the Etruscans are regarded as almost as well known as an historic people.

But there are many prehistoric races in America which are like the Etruscans. There may not be the same halo about them as there has been about that ancient people, nor is there any classic glory connected with their memories, yet there is the same separation of the later and the earlier races, the same dark obscurity hangs over their early state, the same wonder is awakened by their rude architecture and mysterious inscriptions, and the same admiration is felt for their beautiful specimens of handicraft.

The evidence of a higher culture among them is also found, and the traces of an elaborate and complicated religion, as well as the occasional inscriptions, which indicate possibly a familiarity with letters even, all serve to make these prehistoric people as worthy of investigation as ever were the Etruscans of Europe. It has, indeed, been maintained that there are striking resemblances between some of these American races, especially those

in Peru, to the Etruscans, and the affinities and the peculiarities of the Turanian race, to which both are supposed to have belonged, have been studied on this account with more thoughtful consideration.

But if we are to ascertain anything about these earlier people it will also be by the analogy of history. We are reminded that the history of nearly every land has been divided, as was that of Greece, into three great periods, the Mythical, the Heroic and the Historic. These almost always follow one another. In Egypt, in China, in Japan, as well as in Greece, a fabulous history preceded the true, so that the antiquity of these people extended back in immense cycles. The reign of the gods preceded that of men; this was followed by an age when divine and human beings were mingled, and this again was followed by the distinctively human; but each age shaded into one another so that it is almost impossible to draw the line between them.

Such is the realm which tradition alone opens before us. There is something shadowy and uncertain about it, and we maintain that the traditions of these Oriental countries as to the extreme antiquity of the nations, or as to the early state of society, or the national grandeur in the earliest times, will prove false. It was the ambition of these nations to prove a very ancient existence, and later inventions and improvements were by them reflected back upon the earlier times. There may also be a tendency in our own country to give too much credence to tradition, or to rely too much upon imagination in making up our mind as to the condition of the races in prehistoric times, and especially as to the extreme antiquity of man upon the continent. In reference to the historic races of the continent it is an unreliable evidence. The changes of the population are too rapid, the memory of the savage races too uncertain, and the means of communicating or transmitting tradition too imperfect.

It should be said, too, that there are localities on the American continent where there are no traditions of the prehistoric people. The record which may be found in the fragmentary accounts of the last hundred years is all that can be found, and even then this record comes from the broken and decimated tribes of nations, which have impinged upon one another, and who were not occupying their native seats. The description of native tribes before they were removed from their original habitation can be gathered only from a few border tales, or military reports, or the story of the frontier hunter, and the traditions of the locality have never been gathered. Indeed, there are sections in North America which are so strictly prehistoric that no history comes in contact, either by tradition or otherwise, with the

prehistoric times. Of the six or seven grand divisions of the prehistoric population not the half have ever been visited or explored, so that the traditionary history could be given with any reliability. The portions of the continent bordering on the Atlantic Ocean and the Gulf of Mexico have indeed left to us something of an aboriginal history, and the descriptions given of these native tribes in their original abodes may furnish possible analogies for the more remote prehistoric races, but the regions which were the homes of that mysterious people, the so-called Mound Builders, that, also, occupied by the ancient Pueblos and Cliff Dwellers, and we might say all of the interior of the continent, have been left without a history, even of the later tribes. One great work of the archæologist is to gather the fragments of this history from such sources as can now be reached, and so at least draw a picture of the country as it existed during the presence of the aborigines. But as to the more ancient period, neither history nor tradition furnish us with any satisfactory knowledge, and our only source is that referred to, namely, that of analogy.

The manner in which the analogy of history can throw light on the prehistoric ages should then engage our attention.

There is one way at least we may say that history illustrates the prehistoric, and that is by explaining the use of the structures and relics which have survived to modern times. By history, however, we mean the history of the aborigines. It is worthy of remark that there was a period in the history of our land when the proper use of these aboriginal structures and relics could be much better understood than at the present time. In the early era of the Discoveries these works in many localities were occupied, and though they were not in all cases erected by the people who dwelt in them; yet their later use serves well to illustrate their earlier, and therefore the history of these times is very valuable. The mode of life of the successive races was so similar, that it was not difficult for the later races to build on almost the same model which prevailed in the preceding ages. The organization of society and government was also so similar that they demanded similar structures, and many of the same implements and weapons were used by the successive races.

The council-houses, temples, burying-places, as well as private houses might differ in the material, and to a degree in the shape, but as the organization of society of nearly all the earlier races continued on the same model, it is not improbable that we may learn the design of the more ancient structure from the known use of the more modern.

For instance, the description given by the early explorers, such as Ferdinand de Soto and his attendants, by Cabeza de Vaca

and Garcilasso de la Vega, will apply only to the native tribes which then occupied the regions bordering on the Gulf of Mexico and the lower Mississippi; but it has been maintained by later travelers and investigators, such as Adair, Bartram and others, that these races were occupying the same works which a preceding race had built. Such was the tradition of the natives themselves, and such also was the impression which the early explorers gained. At times "these ancient tumuli," as Col. C. C. Jones maintains, "were subjected by the later tribes to secondary uses, so that in not a few instances the summits and flanks of large temple-mounds, originally designed for religious objects, such as the worship of the sun, were by the Creeks and Cherokees converted into stockade forts, used as elevations for council lodges and the residences of their chiefs, or devoted to the purposes of sepulture." (See *Antiquities of Southern Indians*, by C. C. Jones, p. 126.) Yet at other times the erection of a rotunda on a mound of "much ancients date than the building itself," or the location of a "chunky-yard" in the midst of an earthwork whose builders were unknown to the natives, might illustrate the original use of these structures as nothing else could. There is, to be sure, a difficulty in thus reasoning, for the natives themselves "are often as ignorant as we are, by what people or for what purpose these artificial hills were raised" (Bartram's *Travels*, pp. 355-356), and the various stories concerning them at the best "amount to no more than mere conjecture, and leave us entirely in the dark;" yet it is certainly fortunate for us that the races which occupied these works and were the survivors of the successive populations which preceded them, have been so well described by the various historians. Civilization does not and cannot give us any clue to the use of these prehistoric structures. It is only by the study of the savage races that we understand the rude stages of society which existed when they were erected, and thus by a system of gradual approach, we come to appreciate and realize something of the condition of the races which then lived. Had we no other criterion to judge the strange and mysterious works which are found on this continent than that furnished by our modern houses and public buildings, we could not understand them, but we have the means furnished by history.

Even the barbaric architecture of other lands is a better aid to the understanding than the civilized. At times we find an advantage in going back to the ancient history of the world, and in the descriptions of the early patriarchal times, or in that given by Homer of the tribal state, or by Cæsar and Tacitus, and other historians of the early nomadic tribes of Europe, we gain some conception of the state of society in this very early

period of American history. But nothing assists us so much as a familiarity with the savage and semi-savage life of the tribes existing in the very localities which we are studying. It is remarkable that the structures of the races which succeeded one another on American soil resembled one another so closely. This is so in the ancient Asiatic history. It is so in America.

As we read of the successive occupations we may perhaps understand the earlier conditions. The customs of one race fitted into one framework will give us the picture for the frame left by another people. We may take the historic picture out from the structure in which we find it and place it in the works of the prehistoric people, and observe that it is to a degree descriptive, and a truthful likeness of both ages. These likenesses of the prehistoric ages we often meet with in early American history. We have only to read some of the descriptions given by the voyagers or explorers to understand the use of many of these works which seemed so mysterious. Even those mounds and massive pyramids and earthworks which seemed so strange in their design may become plain to our minds, and the life thus put into them may speak to us of the days that have passed. Thus it may be, that the different classes of works, the military and religious, the agricultural and village, and even those designed for games, for funerals or other ceremonies, will yet be understood by the study of the customs of the people who survived the builders of these structures. We may, indeed, need to study the history of these tribes much more closely than we have done, yet it is not impossible that when we come to understand the religions of these Indians, we shall also understand the religious structures of their predecessors; when we know their military habits and customs we shall realize something of the military system which ruled in the erection of the military and defense works; when we know more of the agricultural and domestic life, we shall be able to explain the uses of many of the relics and the works; and when we have become acquainted with the social status and the village life of the tribes which history makes known, we shall know more of the many village structures and communistic houses which are still in existence, though so often in ruins and without inhabitants.

Our great work, then, is to study the still surviving races that we may better understand those which have passed away.

II. We turn, then, to the second source of information, and examine the testimony of physical geography.

There are three maps of the country which the archæologist should have before him. One is the historic, the other the prehistoric, and the third the pre-prehistoric or physical map.

The historic represents the tribes of aborigines, as they were located at the times of the discovery up to the Revolution. The prehistoric represents the location of the earthworks and other remains as they are now found, but which probably were left by the races which existed before the discovery. The physical represents the natural face of the country as it existed before man inhabited it.

Now of these maps the first and the third are known, and they are to be studied to give us information about the second. The ethnological map and the geographical combined may throw some light upon the archæological.

In the maps constructed by the author, the historical and the geographical have been shaded in similar colors, to show the correspondence between the physical geography and the condition of the later races. The archæological was shaded with the same colors, the character of the works being designated by the colors. For instance, in the ethnological or historical map, the great Algonquin race, a nomadic people, are represented by the green, and this corresponds with the high forest land of the physical atlas. The yellow represents the Mobilian nation, an agricultural race which dwelt in the region of the Gulf States, and this corresponds with the yellow or green of the physical atlas, indicating the rich alluvial soil of those states. The blue represents the great Dacotah race, and the varied colors represent the Mandans, Flatheads, and other tribes west of the Rocky Mountains, while those on the Pacific coast are also shaded into one another.

The archæological map has been shaded according to the character of the works; the green representing a preponderance of military or defensive structures, and the yellow representing the structures of agricultural people, consisting of isolated mounds and pyramids, and a light shade, which represents the distribution of that complicated system of earthworks and mounds, the preponderating type of which are the sacred and emblematic. The brick color represents the Pueblos of the West, and the red represents the stone ruins of Mexico and Central America.

Now, the correspondence of these three maps is the point for us to consider. Do the works of the prehistoric times show the effects of the soil and climate in their design and general structure, and is there any such correspondence to the ethnical traits of the historic tribes? Is the key to the three series of maps found in the physical geography?

As we read of the character of the tribes situated in the different localities, do we find a correspondence between their status and social condition and their physical surrounding? This may not be as apparent on this continent as on others. The country



is too continuous for the geographical features to impress themselves upon the races. The mountain ranges run in the wrong directions to mark the zones of climate by any physical barrier. If there is any effect upon the people, the barriers between the nations are not sufficiently distinct to make this perpetual. The nations have not been kept shut in to the effects of these local causes so as to make separate races. The geographical divisions have not made ethnical differences. In Europe, Asia, and Africa the geographical barriers are so marked that they have made racial distinctions which can never be obliterated. There the effects of climate, soil, food, and mode of life are so apparent that now the most natural, and perhaps the most scientific, division of the races is that of Asiatic, European, and African. Whatever we may say about the historic origin of these races, yet as far as the physical characteristics of the people of the eastern hemisphere are concerned, this is the most distinctive and the most natural. But if we adopt the more common classification given by Pritchard and Blumenbach, into Mongolian, Malay, Caucasian, African, and American, we find the correspondence in the colors of these respective races to the physical barriers of the countries which they inhabit. We may not explain it, yet such is the fact. The Mongolians, or the yellow races were the inhabitants of the high table lands of Mongolia and Independent Tartary. The brown races were, on the other hand, the inhabitants of the low plains and islands of the Torrid zone. The white or Caucasian race were originally mountaineers, of Caucasus, but afterward settled in the northern highlands of Asia the forests of Europe, while the negroes, or blacks, were always the inhabitants of the great continent of Africa, where both the effect of climate and soil conspired to produce and perpetuate the physical qualities for which they are distinguished. As to the red or American race, the very fact that this distinction has been recognized, and that the race extends across the two continents, proves in itself that on the western hemisphere there is an exception to the general rule. The racial characteristics here extend through all the geographical barriers, across the various belts of latitude, and we find an homogeneous character in the inhabitants of the entire hemisphere.

According to that classification which designates the American as the red or copper race, the physical geography of the country has produced no ethnical lines. In other respects also, it is apparent that the physical geography has not made any marked ethnical differences. It was the opinion of Dr. S. G. Morton, after a long study of the skulls of the American races, that there was no racial distinction between the inhabitants of this hemisphere. This opinion may not be entirely tenable, and even was held with some

uncertainty by that distinguished ethnologist; for the differences between Peruvians and Mexicans, and between the Aztecs and red Indians, are too manifest; but the idea that the racial peculiarities of skull or skeleton were caused by the geographical surroundings has never to our knowledge been maintained. With the single exception of the Esquimaux, whose pyramidal head and squat form have been assigned to their fish diet and peculiar hyperborean life; no race on *this* continent has been assigned to its locality and there recognized as a creation of its own environment, a human race belonging to an earth-mould.

There is, however, one respect in which we may recognize the effects of the physical surroundings, and that is in the state of society. There is, indeed, a correspondence in this respect between the population and the physical geography. This was so in the condition of the later aboriginal races, and we may suppose it was also so with the earlier prehistoric races. There is even now with the surviving races more or less of a correlation between their mode of life and the country which they inhabit, and the history of the tribes which have been removed from their original seats indicates the same thing. The works and remains, also, of the preceding populations indicate this same correspondence.

For instance, in the mountain region of the Cumberland, in the hill country of the upper Ohio, in Western Virginia, Pennsylvania, and New York, we find a class of works which have been generally classified by the name of military or defensive. A few works of the same kind have been found throughout New England, along the banks of Lake Erie, in various parts of Michigan, and, in fact, wherever there are forests covering the mountains or lining the rivers and the lakes. It would seem, then, that this kind of structure was peculiar to the hills and the forests of the East. The mode of life in these regions was military. It was a necessity of their very situation. Here was the effect of nature upon the state of society which was inevitable. These works were military and defensive, as from the nature of their surroundings they must be. The forests gave too much opportunity for treachery to avoid it. Human nature, when dwelling in such circumstances, would develop in this way. It made no difference what tribe dwelt there, there was a necessity for military habits. We can picture to ourselves exactly the condition of society. Whether the same tribes inhabited these regions, or whether they were different, their mode of life was dictated by circumstances. There were no means by which the people should overrule the force of nature and gain control of her elements. It was one of the peculiarities of prehistoric society that it was conformed altogether to nature. Civilization alone overrides the difficulties and makes the forces of nature

obedient to her wants; but the prehistoric races succumbed to circumstances, and were conformed in their condition to their environment.

We call these military structures comparatively modern, but we do not know how long they continued. If there were those who led a different life, they were probably located in the valleys or on the borders of the streams, just where we find a few agricultural works. But the vast majority of works, whether very ancient or more modern, are of the same class—military and defensive. Over three hundred of these military structures are found in the single State of New York; and scattered over the mountains of Virginia, and Eastern Tennessee and Kentucky, and everywhere where the hunting life and the warlike and predatory state would be most likely to prevail, there these military and defensive structures are found.

Just as the military or warlike tribes of the historical Indians have been identified with the forests and the mountains, so these military structures of the prehistoric races are found in the same localities.

The Iroquois, the Wyandots, and the Eries were a warlike people. The Cherokees were also warriors, and may be regarded as the mountain tribes of the East, while the Delawares and some of the tribes of the Algonquins, inhabiting New England and the northeastern States, led a mingled life, partly agricultural and partly hunting. Thus we have in these localities at least, a correspondence between the state of the population and the physical surroundings, and we need, therefore, to shade the three maps alike. It is so elsewhere, also.

It has been intimated already that there were several grand divisions of the prehistoric population on this continent, but we shall find that this division is according to the social status rather than any ethnic traits.

The ancient populations of the Atlantic coast have left one class of structures behind them, the Mound Builders of the Mississippi Valley another, the Pueblos of Arizona and New Mexico another, the uncivilized races of the Pacific coast another, and the civilized races of Mexico still another. Whether these works were modified, both in their material and in their shape and character, by the physical features of the separate regions or not, the differences in the works are manifest. Each class of ancient works suggests a mode of life different from the other, and the great work of the archæologist is to trace the correlation between this mode of life and the geography of the country. To one who is familiar with the laws which govern human population, and who has observed the effect of the physical upon human nature, this is not difficult. But as an evidence of the prehis-

toric status the subject needs to be studied more attentively. In the grand divisions of the globe, the ethnic divisions follow these physical barriers, but the minor divisions are more difficult to trace, but these may be seen in the various portions of this continent very distinctly.

We in America need only to look over the map and learn the general physical characteristics of each section if we would know what the state of society was in the prehistoric ages. If the hunter life prevailed in the forests, the nomadic life on the prairies, the agricultural on the rich plains and in the alluvial bottom lands of the Gulf States, if a high state of civilization existed among the rich plains and valleys of Mexico, and the Pueblos or rude village life prevailed in the interior of Arizona and New Mexico, it is probable that these were the conditions of society in the prehistoric period. Not that society develops altogether according to its environment, for there are nations that have conquered even the forces of nature; but among the primitive people we must acknowledge the supremacy of the physical causes in giving shape to their state and condition.

Whether the tribes naturally were modified and grew into their earth-mould, or according to their own elective affinities they made choice of localities to suit their ethnic traits, there is certainly a correspondence. Civilized races may have come into this continent and found lodgment in the rich valleys of Central America; the wild tribes from Mongolia and the high plains of Eastern Asia may have wandered until they found the hunting grounds to suit them; the nomads also may have sought the open prairie on the same principle that the northern Hyperborean of the arctic region sought the latitude which he was used to as a habitation; but the geography of our country is dotted with these works of the prehistoric races, which have a wonderful correspondence with their surroundings.

There are, to be sure, according to this theory, some things difficult to account for. In the first place, the later races discovered in those sections were very different from the earlier. There are certainly ethnic traits witnessed in these regions crowding out and overwhelming those which were naturally developed. Different nations having radically different peculiarities have been run into the same environment and may have produced very different states of society.

The warlike hunter Algonquin came upon the peaceful Mound Builder and displaced him. The village life of the Ohio valley disappeared before the incursions of those northern barbarians, just as the civilization of Rome went out under the incursions of the hordes of Goths and Vandals. The Pueblos of Arizona and Utah and Colorado are also occupied by a new race, and the wild

Comanche, the Ute and Apache roam amid the ruins of a higher civilization than they ever knew. Yet, as a general thing, we shall find that this correspondence proves true. Especially if we look away from the later races to the earlier, do we see the effect of natural surroundings in the conditions of the people. The prehistoric and ancient, furnish a picture which corresponds with the scenery far more than the aboriginal or historic. With them the adaptation seemed to be complete. We have only to people the land with these races, and then draw our inferences from the character of the country as to the mode of life which prevailed, to have a complete picture of the prehistoric period.

III. The third source of information is the Archæological.

We have spoken of the different localities, some of them historic and some strictly prehistoric with their relics and associations.

We have also referred to the correspondence between the physical surroundings and the prehistoric condition of these aborigines. But throughout the reasoning, it has been apparent that our main reliance must be after all the Archæological Relics or Remains.

These, we are then to consider as our main source of information.

But they are silent. They give no testimony as to the life, which once existed; no history of the races which have departed. They are lonely and deserted, not even a lingering member of the numerous people which once crowded these mysterious structures is left to tell the tale of the past.

We are now obliged to study man through his works, even as we study the great Creator through His grander works. The evidence of design is that which we rely upon in both cases. Like the watch on the heath we study the mechanism and learn its purpose, and then judge something of the maker. It may be a blind method, but the best we have in the circumstances.

The state of prehistoric society may possibly be determined by the examination of cabinets. There are relics there, which are useful. They show to us the arts of the prehistoric people. They point out to us the culture which they had reached. Classified according to our standard they reveal the materials which were at their disposal. They show the mineralogy of the country and that the early people were familiar with it. They show that each tribe employed the material of his own locality for their weapons and implements.

They reveal some small degree of commerce, and the interchange of metals and other materials.

They exhibit the habits of the people, whether agricultural or nomadic or hunting or fishing. They reveal the warlike appli-

ances, also the peaceful arts, and at the same time they make known the advancement of the races.

The very "ages" associated with these relics are suggestive, and the recognition of the bronze, or the copper or the rude stone or polished stone implements will bring a picture of society before the mind.

These relics, as they have been associated with the states of society which history describes, are indeed evidences. They present a picture to the imagination and they bring before us the scenes which have been depicted elsewhere. One stage of society after another runs before us like a panorama.

If we are not familiar with American aboriginal history, if we have read no border tales, and none of Cooper's novels, if we never saw an Indian, and never read about the early tribes in England, or the Germanic tribes in Europe, if we have only read our Bibles, and had some insight into the primitive patriarchial times and the days when Cain dressed himself in skins and went out and built a city, yet these specimens are instructive.

The more we read and know of the rude tribes, and follow the various travellers all over the vast unknown regions of every continent, the more we make ourselves familiar with the different stages of society, whether in history or in contemporaneous geography, and especially as we study into the philosophy of history, and the rise of civilization, the more valuable shall we see these relics to be.

The collection of relics may not seem to be important, or a single specimen appear to be of any particular value, but the data of the science are thus obtained and a single relic may give a clue which shall lead to wonderful discoveries or reveal a whole gallery of prehistoric pictures.

The author was at one time examining one of the Fire-beds on the Ohio river. An old settler and practical observer was with him. We were discussing the probable origin of these shell-heaps and accumulated fragments. Everything favored the idea that they were natural deposits. The situation on the bank of the river, the conformation of the deposit to the surface of the bottom land, the situation at the bend of the river, the traces of frequent floods over the very spot, and the character of the debris all led to the conclusion that it was only a deposit from the river.

We were conversing; the old settler and practical collector giving arguments in favor of the human origin, the author pointing out the natural causes, until the discussion had almost ended with the exhaustion of patience, when suddenly the writer looked into his own hands, where he was holding what he had taken out of the banks, and exclaimed; "I give it all up; you are right; there is the evidence!" and he held up before the other

the fragmentary broken relics of a rude stone hatchet. He had recognized among the dirt, the groove of the handle, and the truth flashed on his mind at once that it was human in its origin.

His scepticism went down before a single specimen. It was a rude fragmentary relic, but it revealed the whole thing to him.

So there are hints given in a silent way by these relics, which shall be like the falling of the apple on the head of a Newton, or the burning of a piece of sulphur to Goodyear, or the last burning of the household furniture to Pallisey, the potter.

The observation which has been trained in the school of experience, sometimes becomes an intuition, and at last siezes the clue and goes on to great discoveries.

The relics which give their testimony may be those of the warlike or of the agricultural or of the village inhabitants; condition may be of wood or stone or copper; they may be weapons or utensils, or implements, or articles of art or apparel, they may be ornaments, or the mere tokens of the games of pleasure, they may contain the more serious and significant religious emblems and embrace idols and images, or the totems and tribal emblems; or possibly inscriptions and symbols, which give traces of the customs, or astronomical views, and chronology of the worshippers. But none of these are without importance and every one must be studied long and close, for the key to the door of these prehistoric mysteries is among them, and no one knows which will unlock the strange secret to our vision. A single bullet found in a mound in Kentucky, determined the age of a class of earthworks which had been studied with great interest, while a sword hilt has been suggestive of the early explorers' encampments.

The antiquity of the races, the different orders of society, the stages of human development, the ethnic affinities, and the whole subject of the prehistoric condition must be learned from these rude relics as the source of information, and as confirmatory of other evidences.

2. There is a second class of archæological evidences on which we rely.

The remains as well as the relics give us testimony upon the prehistoric condition.

The remains and earthworks of this country are divided into several classes, according to their uses or their character. No general classification has ever been given, but thus far they are only enumerated and then described. If, however, we consider the materials as a basis, we may be able to give some order in the classification.

It is proper to observe that there are traces of a numerous prehistoric population scattered over nearly every part of the broad continent. No one who has not made a point of observing,

would understand how numerous these vestiges are, or understand their design or purpose; yet they are here to present their evidence, to invite our study, and we ourselves are at fault if by comparing and analyzing and attending to their testimony we do not understand the tale.

Let any one go forth into the fields and the meadows, into the hills and valleys, and search for these records of the past, and he cannot fail to trace out an alphabet more striking than the hieroglyphics of Egypt, or the inscription upon the buried palaces of the East. These works are replete with a varied story, every where the decaying skeletons and the silent skulls remind us mournfully of the death that has swept over the land; but the remains of fires, the debris of camps, as well as the running stream and sparkling spring from which they drank, all remind us how recently the living have passed away.

As we go through the silent earthworks, and see all the preparations they made, the walls and ditches for defense, the enclosures they erected for worship, and the monuments or mounds they erected for tombs, we are astonished at the great variety, and the wonderful significance.

If there are modes of life which we do not understand, and structures which are still mysterious in their design, yet they are very expressive of the strange unknown life, of the mysterious religion, the wild aboriginal state. It may not compare with our later civilized condition and modern ideas, for they are only expressive of another condition than that to which we are accustomed.

But the picture of the prehistoric condition cannot be excelled.

Let any one visit one of the renowned defenses situated so beautifully on the lofty hill top, and commanding the distant view of stream and valley, of hill and forest, and then look about him and behold the wonderful adaptation for defense and protection, and he will appreciate what were the dangers from the secret foe, and how the war-whoop must have startled the peaceful inmates.

Let him visit again the quiet village inclosure, and see the surrounding wall, and trace the place of palisades, or tread the path to the unfailing stream, and walk over the happy hunting ground and the delightful valleys, and he has a picture of peace which nothing else can give.

Let him then enter the corn fields or the garden beds, or surmount the elevated platform, or enter the ancient courts and courtyards of the agricultural people, and he again has a view of another state of life, which he did not know. Again, let him enter one of the sacred enclosures and look about him and see the altars and the temple platforms, and all the complicated



structures, wherever the social fires were lit and the victims of sacrifice were offered, and even if he knows not the worship that then prevailed, it is not difficult to imagine something of the religious customs of the people.

The grand pageant of the assembled multitudes passes before him as they gather at their annual feasts, or at their religious ceremonies, or their great burials, or for their war expeditions. In imagination he sees in one place the merry-making and the dance, he hears the music and the laughter; but at another he looks upon the smoke and the slaughter and the many mysterious rites. Here he beholds the "very great burning," the solemn mourning, the sacred burial; there he sees the plumed warriors, armed with their stone axes and flint spears and maces, either in fleets of canoes, navigating the waters, or in long lines traversing the forests. Everywhere the scene is suggestive of a life which has passed away. Whether one stands on the lofty pyramids of Mexico, which once reeded with the gore of human victims taken in battle and slaughtered as sacrifice, or among the extensive dwellings of the Pueblos, where such multitudes gathered for defense or for residence, or among the sacred enclosures of the Mound Builders, where a still stranger people once lived and toiled and worshipped—yet each structure is suggestive of a life which once prevailed, but which has passed away, and of the prehistoric condition of this continent.

# THE AMERICAN ANTIQUARIAN,

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This Magazine occupies one of the most suggestive and instructive fields in all the range of American Literature. No department of Science is making more rapid progress than Archæology, and no country is more prolific in the curious and strange facts which arise in connection with this science than America. Europeans are now fitting out exploring expeditions to Mexico, and European societies are making a specialty of American subjects. And it is said that many European scholars are making more advance in American Archæology than the Americans themselves. Fortunately, however, this subject is gaining attention here, and a reasonable supposition is, that American citizens are soon to become as well acquainted with the things which lie at their own doors as those which are at a distance.

The subject of Archæology has heretofore abounded with the crudities of many half-taught students; but as the American continent furnishes so many new facts which may serve as a basis for the science, it is probable that the subject will be better understood in the future. The record of the past is here so freshly written, and the primitive stages of society are so lately preserved, that it must be that the "Science of Man" will here make great progress, and that the ethnical philosophy of the world will be influenced by the discoveries here made. The study of these subjects may not increase the wealth or develop the skill of our people, yet it may be well for us to know something of the rich treasures of truth which lie beneath the surface, and that we bring them out to swell the amount of human learning as well as to show what marvelous things are connected with the previous occupancy of this continent.

We call attention to this Magazine as one of the hopeful signs that a thorough and at the same time progressive scholarship is appearing on this continent. The appearance of a magazine devoted to Archæology as a specialty might, a few years ago, have called forth a prediction of failure; but the fact that the ANTIQUARIAN has now reached its third Volume, and numbers amongst its contributors some of the first names in the United States, is evidence that the American mind is becoming awakened to the subject.

The Oriental Department of this magazine is worthy of notice. It is well known that the discoveries in the East have wonderfully increased during the last few years, and that they have thrown new light on history, and made the study of antiquity much more interesting and useful. Classic students and scholars generally have found the discoveries very useful, and a knowledge of them quite essential to their progress. The descriptions of ancient monuments and relics of art form an interesting line of study, but the comparison of language, literature, mythologies and traditions, sacred books and religions, of symbols and ceremonies, are important, both for the understanding of history and the solution of many of the problems which are now before our minds. This magazine is designed to be the exponent of Classic Archæology, and will be the medium of communication of American scholars on these subjects.

For Bible students the Oriental Department of this magazine is especially valuable. The illustrations of Scripture passages, and the confirmation of Bible history from the discoveries in the East have been of late so striking that every intelligent person wants to know what these discoveries are. Not only this, but the increased acquaintance with the language of the East, and with ancient customs and religions have brought the study of the Bible into the position of an advanced science, and made a knowledge of Oriental Archæology a necessity. This magazine embodies the new learning on these points, yet without bringing any conflict between it and established views. The destructive criticisms of German scholars, and the subtle attacks of a certain class of scientists upon the sacred scriptures, require a magazine which may treat of these subjects in a thorough manner, and yet be defensive of revealed truth.

For Oriental, Biblical and Classical Scholars.

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We would call attention to the fact that the AMERICAN ANTIQUARIAN and the ORIENTAL AND BIBLICAL JOURNAL are hereafter to be combined, the ANTIQUARIAN to embrace all the material which has heretofore appeared in the other Journal.

This gives to the ANTIQUARIAN much more variety and a greater range of topics, and adds to the list of contributors a large number of very able and learned men, and at the same time concentrates into one magazine the subject of Oriental, Biblical, Classical, European and American.

The contributions on American subjects will be given precedence in the order of arrangement, those on Oriental and Biblical subjects in a department by themselves, but the aim will be to make the magazine broad and comprehensive as possible. Especial attention will be given to the articles in foreign magazines, and to the record of all late discoveries and explorations.

We have no doubt that in the new form the ANTIQUARIAN will interest a much larger class of readers, and we expect for it a wider circulation, and a great increase in the number and variety of contributions.

For Biblical and Classical Scholars the magazine will be especially valuable. It is well known that the discoveries in the East have opened a new world, and that the light thus thrown upon Ancient History and on Bible and Classic Studies have given a wonderful advance to learning, though the facts have heretofore been so scattered that only a few students have reaped the results from these discoveries. Our hope is that we shall be able to so collect information from the various sources, that our readers shall have the benefit of the latest investigations in all parts of the world, and that American scholars may come to recognize this magazine as their medium of communication. The plan is a broad one, but is worth sustaining, and we hope that College Professors and Students, Clergymen and Bible Scholars, and all who are interested in Oriental, Biblical or Classical Studies, will help support the Magazine.

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### TESTIMONIALS TO THE ORIENTAL DEPARTMENT.

THE ANTIQUARIAN has engaged a large corps of special contributors, including some weighty names, and its pages give evidence of the editor's own ability, industry and broad outlook. As Palestinian explorations and related lines of inquiry do not rouse much non-Christian enthusiasm, it was inevitable that the department of Oriental and Biblical Archaeology should fall chiefly into the hands of clergymen like Drs. Crosby, Abbott, and Strong, Rev. T. O. Paine, the Egyptologist, and Rev. A. H. Sayce, the Oxford Assyriologist; but it will help to revive the waning faith in miracles, if there should be no sign of unscientific bias on the part of men presumably committed to certain theological conclusions. Nevertheless, this portion of the magazine is certain to be timely and valuable, and it will probably have a wide circulation of its own.—*New York Observer.*

We know of nothing that is so much calculated to aid the Biblical student in his studies. We therefore feel the liveliest interest in the success of the enterprise, and hope Mr. Peet, who is qualified to undertake this work, will be abundantly encouraged.—*Central Presbyterian, Richmond, Va.*

We take pleasure in calling attention to it. Its objects are: "First, to give the results of the latest researches in Oriental lands, especially as they may illustrate Scripture history. Second, to present the more recent views in Biblical criticism, but from a strictly evangelical standpoint. Third, to condense the various discussions on science and religion so that readers may have before them the latest phases of thought on these subjects in briefest and most comprehensive form. Arrangements have been made with the best scholars of this country and of Europe to furnish articles in their own departments, and a digest of the various reports and periodicals will be furnished by competent authors and translators."—*Christian Secretary, Hartford, Ct.*

It is published in the interest of evangelical truth, and, as we believe that true science and evangelical Christianity are in thorough harmony, we shall expect to find this periodical furnishing great assistance in the elucidation and confirmation of the truth of the Bible. The articles in the present number are short, but they deal with interesting subjects, and there is about them the atmosphere of health and vigor.—*Church Advocate, Harrisburg, Pa.*



